

# Iowa Department of Natural Resources

## Title V Operating Permit

**Name of Permitted Facility:** Flint Hills Resources Iowa Falls, LLC  
**Facility Location:** 21050 140<sup>th</sup> Street, Iowa Falls, Iowa 50126  
**Air Quality Operating Permit Number:** 19-TV-005  
**Expiration Date:** September 9, 2024  
**Permit Renewal Application Deadline:** March 9, 2024

**EIQ Number:** 92-6959  
**Facility File Number:** 42-01-019

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### Responsible Official

**Name:** Garland Krabbenhoft  
**Title:** Plant Manager  
**Mailing Address:** 21050 140th Street, Iowa Falls, Iowa 50126  
**Phone #:** 641-648-8917

### Permit Contact Person for the Facility

**Name:** Garland Krabbenhoft  
**Title:** Plant Manager  
**Mailing Address:** 21050 140th Street, Iowa Falls, Iowa 50126  
**Phone #:** 641-684-8917  
**Email:** Garland.Krabbenhoft@fhr.com

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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

**For the Director of the Department of Natural Resources**

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Lori Hanson, Supervisor of Air Operating Permits Section

Date

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## Abbreviations

acfm.....	actual cubic feet per minute
bu/hr.....	bushels per hour
CFR.....	Code of Federal Regulations
CE .....	control equipment
CEM.....	continuous emissions monitor
DDGS.....	distillers dried grains with solubles
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU .....	emission unit
gr./dscf .....	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
kW.....	kilowatts
Mgals.....	million gallons
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS .....	new source performance standard
ppmv .....	parts per million by volume
lb./hr.....	pounds per hour
lb./MMBtu .....	pounds per million British thermal units
SCC.....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC .....	Standard Industrial Classification
tpy .....	tons per year
USEPA.....	United States Environmental Protection Agency

### Pollutants

PM.....	particulate matter
PM <sub>10</sub> .....	particulate matter ten microns or less in diameter
SO <sub>2</sub> .....	sulfur dioxide
NO <sub>x</sub> .....	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: Flint Hills Resources Iowa Falls, LLC

Permit Number: 19-TV-005

Facility Description: Industrial Organic Chemicals, NEC (SIC 2869)

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## Equipment List

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Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number	
EP S10	EU P10A	DDGS Dryer A	03-A-1313-S10	
	EU P10B	DDGS Dryer B		
	EU B10A	Heat Recovery Boiler A		
	EU P50			Slurry Tank #1
				Slurry Tank #2
				Cook Tube #1
				Cook Tube #2
				Cook Flash Vessel #1
				Cook Flash Vessel #2
				Yeast Tank #1
				Yeast Tank #2
				Beer Column #1
				Beer Column #2
				Side Stripper #1
				Side Stripper #2
				Rectifier Column #1
				Rectifier Column #2
				190 Proof Condenser #1
				190 Proof Condenser #2
				Molecular Sieve Bottles #1 through #3
				Molecular Sieve Bottles #4 through #6
				Molecular Sieve Vaporizer #1
				Molecular Sieve Vaporizer #2
				200 Proof Condenser #1
				200 Proof Condenser #2
				Reflux Tank #1
				Reflux Tank #2
				Regen Tank #1
				Regen Tank #2
				200 Proof Flash Vessel #1
				200 Proof Flash Vessel #2
		CIP Screen		
		Acid Wash Tank		

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
		Centrate Tank #1	
		Centrate Tank #2	
		Centrifuges	
		Evaporators	
	EU 64	Methanator #1	
	EU 65	Methanator #2	
	EU 66	Methanator #3	
EU 67	Methanator #4		
EP S10B	EU P10C	DDGS Dryer C	05-A-238-S9
	EU P10D	DDGS Dryer D	
	EU B10B	Heat Recovery Boiler B	
	EU P50B	Slurry Tank #1	
		Slurry Tank #2	
		Cook Tube #1	
		Cook Tube #2	
		Cook Flash Vessel #1	
		Cook Flash Vessel #2	
		Yeast Tank #1	
		Yeast Tank #2	
		Beer Column #1	
		Beer Column #2	
		Side Stripper #1	
		Side Stripper #2	
		Rectifier Column #1	
		Rectifier Column #2	
		190 Proof Condenser #1	
		190 Proof Condenser #2	
		Molecular Sieve Bottles #1 through #3	
		Molecular Sieve Bottles #4 through #6	
		Molecular Sieve Vaporizer #1	
		Molecular Sieve Vaporizer #2	
		200 Proof Condenser #1	
		200 Proof Condenser #2	
		Reflux Tank #1	
		Reflux Tank #2	
		Regen Tank #1	
		Regen Tank #2	
		200 Proof Flash Vessel #1	
		200 Proof Flash Vessel #2	
		CIP Screen	
	Acid Wash Tank		
Centrate Tank #1			

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>DNR Construction Permit Number</b>
		Centrate Tank #2	
		Centrifuges	
		Evaporators	
EP S15	EU 01	Grain Receiving Pit #1	03-A-1314-S5
	EU 02	Grain Receiving Pit #2	
	EU 03	Receiving Elevator #1	
	EU 04	Receiving Elevator #2	
	EU 05	Scalping Bin	
EP S30	EU P30	Clean Grain Day Bin	03-A-1315-S6
	EU P31	Hammermill #1	
	EU P32	Hammermill #2	
	EU P33	Hammermill #3	
	EU P34	Hammermill #4	
	EU P35	Screw Conveyor #1	
EP S40	EU P40	Fermentation P40	03-A-1316-S8
EP S40B	EU P40B	Fermentation P40B	05-A-239-S7
EP S90	EU 90	DDGS Loading	03-A-1318-S1
EP S91	EU S91	DDGS Loading	06-A-647-S1
EP S70	EU P70	DDGS Cooler	03-A-1317-S5
EP S70B	EU P70	DDGS Cooler	05-A-240-S4
EP F80	EU P80	Cooling Tower	05-A-241-S3
EP F80B	EU P80B	Cooling Tower	05-A-242-S3
EP T60A	EU T60A	Denatured Ethanol Storage Tank	06-A-357-S2
EP T60B	EU T60B	Denatured Ethanol Storage Tank	06-A-358-S2
EP T61	EU T61	Denatured Ethanol Storage Tank	03-A-1321-S3
EP T62	EU T62	Denatured Ethanol Storage Tank	03-A-1322-S3
EP T63 & EP T65	EU T63 & EP T65	200 Proof Ethanol Storage Tanks	03-A-1323-S4 03-A-1325-S4
EP T64	EU T64	Denaturant Storage Tank	03-A-1324-S3
EP T66	EU T66	190 Proof Ethanol Storage Tank	06-A-359-S2
EP F100	EU F100	Truck Traffic	06-A-361-S2
EP F90	EU F90	VOC Emissions from Equipment Leaks	06-A-360-S1
EP SEP11	EU 64	Methanator #1	03-A-1319-S6
	EU 65	Methanator #2	
	EU 66	Methanator #3	
	EU 67	Methanator #4	
EP SEP22	EU SEP22	Truck Product Loadout	03-A-1320-S6
EP SEP22B	EU SEP22B	Rail Product Loadout	05-A-243-S6
EP S100	EU S100	Emergency Fire Pump	05-A-244-S3
EP S110	EU S110	Grind System #5	16-A-135
	EU S111	Grind System #6	

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>DNR Construction Permit Number</b>
EP S120	EU S120	Grain Receiving Pit #3	16-A-329
	EU S121	Receiving Elevator #3	
EP S130	EU 130	Grain Bin #3	16-A-330
EP S140	EU 140	Grain Bin #4	16-A-331
EP F130	EU F130	WDGS Storage and Loadout	14-A-456-S1
EP F150	EU F150	Open Transportation Devices	14-A-457

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**Insignificant Activities Equipment List**

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<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
TS-8305	Corrosion Inhibitor Tank
TK-13500	Corn Oil Dump Tank
TK-13500	Corn Oil Reactor Tank
TR-13501	Corn Oil Agitator Tank
S100	Diesel Tank
TS-12501	Sulfuric Acid Tank
TF-6101	Whole Stillage Tank
TF-6810	Syrup Tank
TF-2101	Cook Water Tank
TF-6801	Thin Stillage Tank
TF-2401	Liquefaction Tank
TS-10502	Methanator Feed Tank

## II. Plant-Wide Conditions

Facility Name: Flint Hills Resources Iowa Falls, LLC

Permit Number: 19-TV-005

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

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### Permit Duration

The term of this permit is: 5 years

Commencing on: 9/10/2019

Ending on: 9/9/2024

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

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### Emission Limits

*Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:*

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO<sub>2</sub>): 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e"

### Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or

dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

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#### **40 CFR 60 Subpart A Requirements**

This facility is an affected source and these *General Provisions* apply to the facility. The affected units are EU B10A, EU B10B, EP T60A, EP T60B, EP T61, EP T62, EP T63, EP T64, EP T65 EP T66 and EU F90.

See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart A  
567 IAC 23.1(2)

#### **40 CFR 60 Subpart Db Requirements**

This facility is subject to Standards of Performance for *Industrial Commercial Institutional Steam Generating Units*. The affected units are EU B10A, EU B10B.

See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart Db  
567 IAC 23.1(2) "ccc"

#### **40 CFR 60 Subpart Kb Requirements**

This facility is subject to Standards of Performance for *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. The affected units are EP T60A, EP T60B, EP T61, EP T62, EP T64, EP T65 and EP T66.

See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart Kb  
567 IAC 23.1(2) "ddd"

#### **40 CFR 60 Subpart VVa Requirements**

This facility is subject to Standards of Performance for *Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006*. The affected units are equipment in VOC service and any applicable devices and systems (as defined in 40 CFR 60.481) in the entire facility. The owner or operator shall comply with the applicable requirements in 40 CFR 60.480 through 60.489, including recordkeeping requirements in 40 CFR 60.486 and reporting requirements in 40 CFR 60.487.

See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart VVa  
567 IAC 23.1(2) "nn"

#### **40 CFR 63 Subpart A, General Provisions & 40 CFR 63 Subpart ZZZZ Requirements**

This facility is subject to National Emission Standards for Hazardous Air Pollutants, Subpart A, General Provisions and National Emission Standards for Hazardous Air Pollutants *Stationary Reciprocating Internal Combustion Engines* (RICE NESHAP). The affected unit is EP S100. Applicable requirements are incorporated in the Emission Point-Specific conditions.

See Appendix for a link to the Standards.

Authority for Requirements: 567 IAC 23.1(4) "cz"  
40 CFR 63 Subpart A  
40 CFR 63 Subpart ZZZZ

### III. Emission Point-Specific Conditions

Facility Name: Flint Hills Resources Iowa Falls, LLC  
 Permit Number: 19-TV-005

**Emission Point ID Number: EP S10**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Emission Units (DDGS Dryers & Distillation 1)  
 Emissions Control Equipment ID Number: CE C10, CE SEP11, EU P10A  
 Emissions Control Equipment Description: Thermal Oxidizer 1 (CE C10), Methanator Flare (CE SEP11) and Dryer A (EU P10A)

**Table: Emission Units (DDGS Dryers & Distillation 1)**

<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Rated Capacity</b>	<b>Control Equipment</b>
EU P10A*	DDGS Dryer A	67.1 MMBtu/hr	Thermal Oxidizer 1 (CE C10)
EU P10B*	DDGS Dryer B	67.1 MMBtu/hr	
EU B10A*	Heat Recovery Boiler A (TO/HRSG System 1)	147.4 MMBtu/hr	None
EU P50	Slurry Tank #1	17,716 Gallons	Thermal Oxidizer 1 (CE C10)
	Slurry Tank #2	16,000 Gallons	
	Cook Tube #1	750 gpm	
	Cook Tube #2	750 gpm	
	Cook Flash Vessel #1	750 gpm	
	Cook Flash Vessel #2	750 gpm	
	Yeast Tank #1	18,000 Gallons	
	Yeast Tank #2	17,000 Gallons	
	Beer Column #1	800 gpm	
	Beer Column #2	800 gpm	
	Side Stripper #1	135 gpm	
	Side Stripper #2	135 gpm	
	Rectifier Column #1	160 gpm	
	Rectifier Column #2	160 gpm	
	190 Proof Condenser #1	500 gpm	
190 Proof Condenser #2	500 gpm		

<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Rated Capacity</b>	<b>Control Equipment</b>
	Molecular Sieve Bottles #1 through #3	270 gpm	Thermal Oxidizer 1 (CE C10)
	Molecular Sieve Bottles #4 through #6	270 gpm	
	Molecular Sieve Vaporizer #1	175 gpm	
	Molecular Sieve Vaporizer #2	175 gpm	
	200 Proof Condenser #1	135 gpm	
	200 Proof Condenser #2	135 gpm	
	Reflux Tank #1	600 Gallons	
	Reflux Tank #2	600 Gallons	
	Regen Tank #1	600 Gallons	
	Regen Tank #2	600 Gallons	
	200 Proof Flash Vessel #1	150 gpm	
	200 Proof Flash Vessel #2	150 gpm	
	CIP Screen	1,200 gpm	
	Acid Wash Tank	2,200 Gallons	
	Centrate Tank #1	990 Gallons	
	Centrate Tank #2	990 Gallons	
	Centrifuges	1,600 gpm	
	Evaporators	400 gpm	
EU 64	Methanator #1**	300 gallons per minute (Total System Capacity); 30,000 gallons each	Methanator Flare (CE SEP11) or Dryer A (EU P10A) and Thermal Oxidizer 1 (CE C10)
EU 65	Methanator #2**		
EU 66	Methanator #3**		
EU 67	Methanator #4**		

\* The Raw Material/Fuel for EU P10A, EU P10B and EU B10A is natural gas, process gas or biogas. The raw material(s) for all units of EU P50 is at least one of the following: Ethanol, mash, yeast, beer, whole or thin stillage, Centrate, CIP, acid wash, VOCs or HAPs.

\*\* The Raw Material/Fuel for the Methanators is methane. The Methanator units may be vented to Dryer A (EU P10A) and their combustible gases burned before the exhaust is emitted through the thermal oxidizers and out the stack (EP S10). If these units are not vented through Dryer A, they shall be vented to the Methanator Flare (CE SEP11).

## Applicable Requirements

### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

#### **Emission Limits – New Source Performance Standards**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	0.1 lb/MMBtu <sub>(1)</sub>	567 IAC 23.1(2)"ccc" <sup>(2)</sup>

<sup>(1)</sup> As indicated in 40 CFR §60.44b(h) and §60.44b(h)(i), compliance with this limit is determined on a 30-day rolling average basis and applies at all times, including periods of startup, shutdown, and malfunction. This limit applies to each individual steam generating unit, as defined in 40 CFR §60.41b.

<sup>(2)</sup> IDNR reference to 40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.*

#### **Emission Limits**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
Particulate Matter (PM) – State	3.85	NA	0.1 gr/dscf	567 IAC 23.4(7), 03-A-1313-S10
PM <sub>10</sub>	3.85	NA	NA	03-A-1313-S10
Opacity	NA	NA	40% <sup>(1)</sup>	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	8.99	NA	500 ppmv	567 IAC 23.3(3)"e", 03-A-1313-S10
Nitrogen Oxides (NO <sub>x</sub> ), EP S10	27.5 <sup>(3)</sup>	NA	NA	03-A-1313-S10
Nitrogen Oxides (NO <sub>x</sub> ), TO/HRSGs	NA	96.6 <sup>(2)</sup>	NA	
Volatile Organic Compounds (VOC)	1.35	NA	NA	
Carbon Monoxide (CO)	10.74	NA	NA	
Acetaldehyde	0.23	NA	NA	
Single HAP	0.25	NA	NA	
Total HAP	0.84	NA	NA	

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" (No VE) will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Emission limit established in Project 18-129 refer to Operating Requirements with Associated Monitoring and Recordkeeping for requirements for demonstrating compliance with this limit. The annual emission limit only applies to the fossil fuel fired boilers EU B10A/CE C10 and EU B10B/CE C10B.

(3) The emission limit is based on a 30-day rolling average. Limit applies to all emissions from stacks EP S10 and EP S10B.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Federal Standards**

New Source Performance Standards (NSPS)

The following subparts apply to the emission unit(s) in this permit:

<b>EU ID</b>	<b>Subpart</b>	<b>Title</b>	<b>State Reference (567 IAC)</b>	<b>Federal Reference (40 CFR)</b>
EU B10A	A	General Provisions	23.1(2)	§60.1 – §60.19
	Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	23.1(2)"ccc"	§60.40b – §60.49b

**Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* [§60.40b - §60.49b], including those not specifically mentioned in this permit. If differences in language are found between this permit and Subpart Db, the language specified in Subpart Db shall be considered correct.
- B. The owner or operator shall operate the Thermal Oxidizer 1 (CE C10) at all times that process streams are being vented to the equipment.
- C. During operation, the Thermal Oxidizer 1 (CE C10) shall maintain a temperature (3-hour average) of no less than 50 degrees Fahrenheit below the average temperature recorded during the most recent performance test, which demonstrated compliance with the emission limits.
  - i. The owner or operator shall properly operate and maintain equipment to continuously monitor the temperature of the Thermal Oxidizer. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals or per a written facility-specific operation and maintenance plan.

- ii. The owner or operator shall keep hourly records of the operating temperature of the Thermal Oxidizer and record all periods (during actual operations) where the 3-hour block average temperature is less than -50 degrees Fahrenheit than the average temperature observed during any performance test that demonstrated compliance at comparable operating conditions. This requirement shall not apply on the days the Thermal Oxidizer, or the equipment the Thermal Oxidizer controls, is not in operation
- D. The DDGS Dryers (EU P10A and EU P10B) and the Thermal Oxidizer 1 (CE C10) shall combust only natural gas and/or process off-gases. The Waste Heat Recovery Boiler (EU B10A) shall not combust any supplemental fuel.
  - i. As indicated in 40 CFR §60.49b(d)(1), the owner or operator shall record and maintain records of the amounts of each fuel combusted in the thermal oxidizer/heat recovery boiler system during each day. In addition, the owner or operator shall calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. Per 40 CFR §60.41b, the *annual capacity factor* is defined as the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
- E. The plant-wide total amount of dried distillers grain with solubles (DDGS) produced shall not exceed 369,643 tons per twelve-month rolling period.
  - i. By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous month.
  - ii. By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous twelve (12) months.
- F. The owner or operator shall inspect and maintain the Thermal Oxidizer 1 (CE C10) according to the facility's (Plant No. 42-01-019) operation and maintenance plan.
  - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
    - The date any inspection and/or maintenance was performed on the control equipment;
    - Any issues identified during the inspection;
    - Any issues addressed during the maintenance activities; and,
    - Identification of the staff member performing the maintenance or inspection.
- G. As indicated in 40 CFR §60.46b(e)(3), the owner or operator shall demonstrate compliance with the emission limits for NO<sub>x</sub> required in §60.44b (lb/MMBtu) on a continuous basis through the use of a 30-day rolling average emission rate.
- H. As indicated in 40 CFR §60.49b(g), the owner or operator shall maintain records of the following information for each steam generating unit operating day and it shall be submitted in a report, as required in 40 CFR §60.49b(i).
  - i. Calendar date;

- ii. The average hourly NO<sub>x</sub> emission (as NO<sub>2</sub>) rates measured;
  - iii. The 30-day average NO<sub>x</sub> emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
  - iv. Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emission standard under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - v. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - vi. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
  - vii. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
  - viii. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - ix. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
  - x. Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.
- I. The facility is required to monitor annual NO<sub>x</sub> emissions monthly and on a 365-day rolling basis to ensure compliance with the 96.6 tons/year limit. The owner or operator shall demonstrate compliance with the NO<sub>x</sub> lb/hr and tpy emissions limits, as specified in Section 1, in the following manner:
- i. NO<sub>x</sub> emissions shall be calculated using CEMS concentration readings (ppm<sub>v</sub>), Method 19, and fuel gas flow rate. The equations provided in Step 1 and Step 2 shall be used to calculate the NO<sub>x</sub> emission rate.
    - Step 1
    - $E = Cd \times Fd [20.9/(20.9 - O_2d)]$
    - Where E = pollutant emission rate in lb/MMBtu
    - Cd = pollutant concentration in lb/dscf
    - For NO<sub>x</sub> Cd = ppm<sub>v</sub> x 1.194 x 10<sup>-7</sup>
    - Fd = Oxygen based F-factor in dscf/MMBtu (use 8710 for natural gas)
    - O<sub>2</sub>d = oxygen content of stack gas on a dry basis
    - Step 2
    - $Er = E \text{ (lb/MMBtu)} \times [\text{Heat input per hour for TO} + \text{DDGS Dryers}] \text{ (MMBtu/hr)}$
    - Where Er is emission rate calculated in lb/hr
    - Heat input per hour in MMBtu/hr is calculated as:
    - Fuel feed rate for TO and DDGS Dryers (cubic feet/hr x fuel heat content (MMBtu/cubic feet)
    - Fuel heat content value for natural gas will be based on 12-month rolling average of the facility's actual values.
  - ii. The facility shall conduct four quarterly Bias-Adjustment Tests (BAT)<sup>(1)</sup>. After each Bias-Adjustment test (BAT) facility shall use the following equation to calculate a

- percentage difference.
- a)  $[(Er - BAT) \times 100] / BAT = \text{percentage difference} = PD$
  - b)  $1 + \text{abs}(PD/100) = \text{adjustment factor} = AF$
- iii. The facility shall adjust the Er value calculated in Step 2 using the methodologies listed below.
- a) After each BAT, the facility shall adjust the calculated Er values for NOx, if the percentage difference (PD) as calculated in I.ii (shown above) is a negative value. If the percentage difference (PD) in I.ii is positive, facility shall not make any adjustment.  $\text{Adjusted Er} = Er * AF$
  - b) If adjustments are needed for more than one of the initial quarterly BATs, the total adjustment will be calculated as sum of the absolute value of the new percentage difference and the previous adjustment factor. If the percentage difference in I.ii (shown above) is positive, facility shall not make any change to the adjustment factor.  $\text{New adjustment factor} = \text{old adjustment factor} + \text{abs}(PD)$
  - c) In subsequent years, during the annual BAT<sup>(1)</sup>, the facility shall compare the adjusted Er value, in lb/hr, for NOx, as specified in I.ii (shown above). Steps 1 and 2, with the BAT test result. The facility shall calculate a percentage difference using the equation specified in I.ii (shown above). If the percentage difference shows that the facility is under-reporting (i.e. negative value), an adjustment will be made using the adjustment factor in I.ii (shown above). and the adjusted Er equation in I.iii (shown above).
  - d) If any adjustment factors are utilized by the facility, the CEM quarterly report submission will include an explanation of the adjustment factor and start date for using this factor. The total adjustment factor utilized after completion of four consecutive quarterly BATs will be detailed in the annual tons per year report submitted to the department with the 4<sup>th</sup> Quarter CEM report. Adjustment factor information will also be included as part of the bias adjustment test report submission.
  - e) If the facility would like to remove or decrease the adjustment factor, four consecutive quarterly BATs will be completed per the procedures above and the adjustment factor (if necessary) will be recalculated per the procedures of this permit.
- iv. The facility shall calculate daily emissions in pounds per day, using the adjusted Er value as specified in I.i, ii and iii (shown above).
- v. Using the daily values in pounds per day, the facility shall convert the calculated values to tons per year (tpy), on a rolling 365-day basis. The tpy values shall be submitted to the department at the end of each year with the 4<sup>th</sup> quarter CEM report.
- vi. The Department shall evaluate compliance with tpy emissions limits in Section 1 using the pound per day and ton per year results submitted by the facility for NOx each year.
- vii. The facility shall submit the following within 45-days of BAT test completion to the Department for four consecutive quarters:
- a) The BAT test result in lb/hr and the corresponding calculated Er value in lb/hr, as specified in I.i, ii and iii. for the duration of the BAT test.
- viii. If the facility is unable to demonstrate that the facility's calculation, using Method

- 19, for four (4) consecutive quarters (out of the eight (8) consecutive quarters allotted for achieving compliance), is underreporting the Adjusted Er by less than 10.0% when compared to the BAT test results; then installation, calibration, maintenance and operation of a flow meter shall be required within six months to calculate lb/hr emission rate of NOx. This flow meter shall be capable of meeting EPA Performance Specification 6, (40 CFR Part 60, Appendix B).
- ix. The facility shall be required to submit quarterly reports for all pollutants monitored using the CEMS. The NOx emission rate, Er, included in these reports shall reflect any applicable adjustment factors. If an adjustment factor is applied to only a portion of the quarter, the cover letter to the CEM quarterly report will include the start date for the adjustment factor.
  - x. On a daily basis, the facility shall calculate and record the combined 30-day rolling average hourly NOx emissions, in pounds per hour, for EP S10 and EP S10B.
- J. The permittee shall use the NOx CEM data, the natural gas fuel usage records, and the equation below to calculate and record the monthly NOx emissions from the TO/HRSGs. The permittee shall maintain records of all data used to perform the calculations:
- i. 
$$NO_x \left( \frac{\text{ton}}{\text{month}} \right) = [S10_{NO_x}] \times \left[ \frac{1.2 \times NG_{TO/HRSG}}{(1.2 \times NG_{TO/HRSG}) + (NG_{Dryers})} \right]$$

Where:

    - NOx (ton/month) = NOx from TO/HRSG ((EU B10A)
    - S10<sub>NOx</sub> = total NOx emissions from stack S10 as measured by the CEM, in tons
    - NG<sub>TO/HRSG</sub> = amount of natural gas combusted in the TO/HRSG (EU B10A) in MMBtu
    - NG<sub>Dryers</sub> = amount of natural gas combusted in the Dryers (EU P10A and EU P10B) in MMBtu
    - 1.2 = compliance margin
- K. The permittee shall use the equation in condition J (shown above) to determine the 12-month rolling total emissions of NOx from the fossil fuel fired boilers EU B10A/CE C10 and EU B10B/CE C10B for each calendar month. The 12-month rolling total shall be calculated at the end of each month. As an alternative to the equation in J, shown above, the permittee may assume that all NOx emissions from stacks S10 and S10B are from the TO/HRSGs.
- L. The permittee shall monitor the natural gas input to the dryers and the TO/HRSG separately.
- i. Record the amount of natural gas input to the dryers and the TO/HRSG in MMBtu/month.

Authority for Requirement: DNR Construction Permit 03-A-1313-S10

- (1) The initial BAT shall be completed quarterly to establish the adjustment factor (AF); then BAT shall be completed annually to retain the accuracy of the adjustment factor used by the facility. The annual BAT can be completed as part of the RATA process

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height (ft, from the ground): 125
- Stack Opening (inches, dia.): 84
- Exhaust Flow Rate (scfm): 71,700
- Exhaust Temperature (°F): 350
- Discharge Style: Vertical, Unobstructed
- Authority for Requirement: DNR Construction Permit 03-A-1313-S10

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Compliance Demonstration(s)**

**Compliance Demonstration Table**

<b>Pollutant</b>	<b>Compliance Methodology</b>	<b>Frequency</b>	<b>Test Run Time</b>	<b>Test Method</b>
NO <sub>x</sub>	CEMS and Recordkeeping	Continuous	Footnote <sup>(1)</sup>	40 CFR 60, Appendix A, Method 7E
VOC	Stack Testing	Annual	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Single HAP	Stack Testing	Annual <sup>(2)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Total HAP	Stack Testing	Annual	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

<sup>(1)</sup> Compliance shall be demonstrated continuously through the use of a Continuous Emissions Monitoring System (CEMS). Four quarterly Bias Adjustment Tests (BAT) shall be conducted in a 12-month period with a minimum of 30 days between tests. The emission rate shall be measured in pounds/hour using the following test method: 40 CFR 60, Appendix A, Methods 1 - 4, Method 7E. BATs shall be conducted while the unit is operating, at a minimum, of at least 80% of historical maximum rated capacity demonstrated by the facility.

(2) Annual stack testing shall be conducted for VOC, Total HAP, and Single HAP. Acrolein, acetaldehyde, formaldehyde, and methanol shall be tested for specifically. The specified HAP compounds that test below detection limits shall be assumed to be emitting at a rate equal to the detection limit.

### **Continuous Emission Monitoring Systems (CEMS)**

- A. The following requirements shall apply to all CEMS for NSPS emission standards in this permit:
- i. The owner or operator shall demonstrate compliance with the nitrogen oxide emission through the use of a continuous emission monitoring system (CEMS). The owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the emission point to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.
  - ii. The 1-hour average NO<sub>x</sub> emission rates measured by the NO<sub>x</sub> CEM required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emissions rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).
  - iii. Per 40 CFR 60.49b(f), when NO<sub>x</sub> emissions are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, 40 CFR Part 60 Appendix A Method 7, 40 CFR Part 60 Appendix A Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days
  - iv. The NO<sub>x</sub> CEMS shall be operated and data collected as required under 40 CFR §60.48b(c), (d), (e), and (f).
- B. The following requirements shall apply to all CEMS for non-NSPS emission standards in this permit:
- i. The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission units associated with EP S10, except for CEMS breakdowns and repairs. Data is recorded during calibration checks and zero and span adjustments.
  - ii. The 1-hour average NO<sub>x</sub> emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards in this permit. At least two data points must be used to calculate each 1-hour average.
  - iii. For each hour of missing emission data (NO<sub>x</sub>), the owner or operator shall substitute data by:
    - a) If the monitor data availability is equal to or greater than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and

handling system for each hour of each missing data period according to the following procedures:

(i) For a missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

(ii) For a missing data period greater than 24 hours, substitute the greater of:

- The 90<sup>th</sup> percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or,
- The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

b) If the monitor data availability is at least 90.0% but less than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:

(i) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

(ii) For a missing data period of more than 8 hours, substitute the greater of:

- The 95<sup>th</sup> percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or,
- The average of the hourly concentration recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

c) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

C. The applicable requirements in Appendix F to Part 60 – *Quality Assurance Procedures* shall apply to all CEMS used for determination of compliance with the applicable emission limits in this permit, including:

i. The owner or operator shall develop and implement a quality control (QC) program. As a minimum, each QC program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

- a) Calibration of the CEMS;
- b) Calibration drift determination and adjustment of the CEMS;
- c) Preventive maintenance of the CEMS (including spare parts inventory);
- d) Data recording, calculations, and reporting;
- e) Accuracy audit procedures including sampling and analysis methods; and,
- f) Program of corrective action for malfunctioning CEMS.

ii. Whenever excessive inaccuracies occur for two consecutive quarters, the owner or operator shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

- iii. The owner or operator shall keep on-site a copy of these written procedures and shall make them available for inspection by the Department.

The owner or operator shall conduct a Relative Accuracy Test Audit (RATA) at least once every four calendar quarters and shall submit RATA reports to the Department as indicated in this permit (see Condition 8 – *Notification, Reporting, and Recordkeeping*).

Authority for Requirement: DNR Construction Permit 03-A-1313-S10

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S10B**

Associated Equipment

Associated Emission Unit ID Numbers: See Table Below

**Table: Emission Units (DDGS Dryers & Distillation 2)**

<b>Emission Unit ID</b>	<b>Emission Unit Name</b>	<b>Maximum Rated Capacity</b>	<b>Control Equipment</b>
EU P10C*	DDGS Dryer C	54.4 MMBtu/hr	Thermal Oxidizer 2 (CE C10B)
EU P10D*	DDGS Dryer D	54.4 MMBtu/hr	
EU B10B*	Heat Recovery Boiler B (TO/HRSG System 2)	122 MMBtu/hr	None
EU P50B	Slurry Tank #1	17,716 Gallons	Thermal Oxidizer 2 (CE C10B)
	Slurry Tank #2	16,000 Gallons	
	Cook Tube #1	750 gpm	
	Cook Tube #2	750 gpm	
	Cook Flash Vessel #1	750 gpm	
	Cook Flash Vessel #2	750 gpm	
	Yeast Tank #1	18,000 Gallons	
	Yeast Tank #2	17,000 Gallons	
	Beer Column #1	800 gpm	
	Beer Column #2	800 gpm	
	Side Stripper #1	135 gpm	
	Side Stripper #2	135 gpm	
	Rectifier Column #1	160 gpm	
	Rectifier Column #2	160 gpm	
	190 Proof Condenser #1	500 gpm	
	190 Proof Condenser #2	500 gpm	
	Molecular Sieve Bottles #1 through #3	270 gpm	
	Molecular Sieve Bottles #4 through #6	270 gpm	
	Molecular Sieve Vaporizer #1	175 gpm	
	Molecular Sieve Vaporizer #2	175 gpm	
	200 Proof Condenser #1	135 gpm	
	200 Proof Condenser #2	135 gpm	
	Reflux Tank #1	600 Gallons	
	Reflux Tank #2	600 Gallons	
	Regen Tank #1	600 Gallons	
	Regen Tank #2	600 Gallons	
	200 Proof Flash Vessel #1	150 gpm	
200 Proof Flash Vessel #2	150 gpm		
CIP Screen	1,200 gpm		

	Acid Wash Tank	2,200 Gallons	
	Centrate Tank #1	990 Gallons	
	Centrate Tank #2	990 Gallons	
	Centrifuges	1,600 gpm	
	Evaporators	400 gpm	

\* The Raw Material/Fuel for EU 10C, EU 10D and EU 10B is natural gas, process gas or biogas. The raw material for all units of EU P50B is at least one of the following: Ethanol, mash, yeast, beer, whole or thin stillage, Centrate, CIP, acid wash, VOCs or HAPs.

### Applicable Requirements

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from this emission point shall not exceed the levels specified below.*

#### **Emission Limits – New Source Performance Standards**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	0.1 lb/MMBtu <sub>(1)</sub>	567 IAC 23.1(2)"ccc" <sup>(2)</sup>

<sup>(1)</sup> As indicated in 40 CFR §60.44b(h) and §60.44b(h)(i), compliance with this limit is determined on a 30-day rolling average basis and applies at all times, including periods of startup, shutdown, and malfunction. This limit applies to each individual steam generating unit, as defined in 40 CFR §60.41b.

<sup>(2)</sup> IDNR reference to 40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.*

#### **Emission Limits**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
Particulate Matter (PM) – State	3.85	NA	0.1 gr/dscf	567 IAC 23.4(7), 05-A-238-S9
PM <sub>10</sub>	3.85	NA	NA	05-A-238-S9
Opacity	NA	NA	40% <sup>(1)</sup>	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	8.99	NA	500 ppmv	567 IAC 23.3(3)"e", 05-A-238-S9
Nitrogen Oxides (NO <sub>x</sub> ), EP S10B	27.5 <sup>(3)</sup>	NA	NA	05-A-238-S9
Nitrogen Oxides (NO <sub>x</sub> ), TO/HRSGs	NA	96.6 <sup>(2)</sup>	NA	

Pollutant	lb/hr	tons/yr	Other Limits	Reference/Basis
Volatile Organic Compounds (VOC)	1.35	NA	NA	
Carbon Monoxide (CO)	10.74	NA	NA	
Acetaldehyde	0.23	NA	NA	
Single HAP	0.25	NA	NA	
Total HAP	0.84	NA	NA	

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" (No VE) will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> Emission limit established in Project 18-129 refer to Condition 5, Operating Requirements with Associated Monitoring and Recordkeeping of DNR Construction Permit 05-A-238-S9 for requirements for demonstrating compliance with this limit. The annual emission limit only applies to the fossil fuel fired boilers EU B10A/CE C10 and EU B10B/CE C10B.

<sup>(3)</sup> The emission limit is based on a 30-day rolling average. Limit applies to all emissions from stacks EP S10 and EP S10B.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Federal Standards**

#### New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
EU B10B	A	General Provisions	23.1(2)	§60.1 – §60.19
	Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	23.1(2)"ccc"	§60.40b – §60.49b

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* [§60.40b - §60.49b], including those not specifically mentioned in this permit. If differences in language are found between this permit and Subpart Db, the language specified in Subpart Db shall be considered correct.

- B. The owner or operator shall operate the Thermal Oxidizer 2 (CE C10B) at all times that process streams are being vented to the equipment.
- C. During operation, the Thermal Oxidizer 2 (CE C10B) shall maintain a temperature (3-hour average) of no less than 50 degrees Fahrenheit below the average temperature recorded during the most recent performance test, which demonstrated compliance with the emission limits.
- i. The owner or operator shall properly operate and maintain equipment to continuously monitor the temperature of the Thermal Oxidizer. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per a written facility-specific operation and maintenance plan.
  - ii. The owner or operator shall keep hourly records of the operating temperature of the Thermal Oxidizer and record all periods (during actual operations) where the 3-hour block average temperature is less than -50 degrees Fahrenheit than the average temperature observed during any performance test that demonstrated compliance at comparable operating conditions. This requirement shall not apply on the days the Thermal Oxidizer, or the equipment the Thermal Oxidizer controls, is not in operation
- D. The DDGS Dryers (EU P10C and EU P10D) and the Thermal Oxidizer 2 (CE C10B) shall combust only natural gas and/or process off-gases. The Waste Heat Recovery Boiler (EU B10B) shall not combust any supplemental fuel.
- i. As indicated in 40 CFR §60.49b(d)(1), the owner or operator shall record and maintain records of the amounts of each fuel combusted in the thermal oxidizer/heat recovery boiler system during each day. In addition, the owner or operator shall calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. Per 40 CFR §60.41b, the *annual capacity factor* is defined as the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
- E. The plant-wide total amount of dried distillers grain with solubles (DDGS) produced shall not exceed 369,643 tons per twelve-month rolling period.
- i. By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous month.
  - ii. By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous twelve (12) months.
- F. The owner or operator shall inspect and maintain the Thermal Oxidizer 2 (CE C10B) according to the facility's (Plant No. 42-01-019) operation and maintenance plan.
- i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
    - The date any inspection and/or maintenance was performed on the control

- equipment;
  - Any issues identified during the inspection;
  - Any issues addressed during the maintenance activities; and,
  - Identification of the staff member performing the maintenance or inspection.
- G. As indicated in 40 CFR §60.46b(e)(3), the owner or operator shall demonstrate compliance with the emission limits for NO<sub>x</sub> required in §60.44b (lb/MMBtu) on a continuous basis through the use of a 30-day rolling average emission rate.
- H. As indicated in 40 CFR §60.49b(g), the owner or operator shall maintain records of the following information for each steam generating unit operating day and it shall be submitted in a report, as required in 40 CFR §60.49b(i).
- i. Calendar date;
  - ii. The average hourly NO<sub>x</sub> emission (as NO<sub>2</sub>) rates measured;
  - iii. The 30-day average NO<sub>x</sub> emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
  - iv. Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emission standard under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - v. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - vi. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
  - vii. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
  - viii. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - ix. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
  - x. Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.
- I. The facility is required to monitor annual NO<sub>x</sub> emissions monthly and on a 365-day rolling basis to ensure compliance with the 96.6 tons/year limit. The owner or operator shall demonstrate compliance with the NO<sub>x</sub> lb/hr and tpy emissions limits, as specified in Section 1, in the following manner:
- i. NO<sub>x</sub> emissions shall be calculated using CEMS concentration readings (ppm<sub>v</sub>), Method 19, and fuel gas flow rate. The equations provided in Step 1 and Step 2 shall be used to calculate the NO<sub>x</sub> emission rate.

Step 1

$$E = Cd \times Fd [20.9/(20.9 - O_2d)]$$

Where E = pollutant emission rate in lb/MMBtu

Cd = pollutant concentration in lb/dscf

For NO<sub>x</sub> Cd = ppm<sub>v</sub> x 1.194 x 10<sup>-7</sup>

Fd = Oxygen based F-factor in dscf/MMBtu (use 8710 for natural gas)

O<sub>2d</sub> = oxygen content of stack gas on a dry basis

Step 2

Er = E (lb/MMBtu) x [Heat input per hour for TO + DDGS Dryers] (MMBtu/hr)

Where Er is emission rate calculated in lb/hr

Heat input per hour in MMBtu/hr is calculated as:

Fuel feed rate for TO and DDGS Dryers (cubic feet/hr x fuel heat content (MMBtu/cubic feet)

Fuel heat content value for natural gas will be based on 12-month rolling average of the facility's actual values.

- ii. The facility shall conduct four quarterly Bias-Adjustment Tests (BAT)<sup>(1)</sup>. After each Bias-Adjustment test (BAT) facility shall use the following equation to calculate a percentage difference.
  - c)  $[(Er - BAT) \times 100] / BAT = \text{percentage difference} = PD$
  - d)  $1 + \text{abs}(PD/100) = \text{adjustment factor} = AF$
- iii. The facility shall adjust the Er value calculated in Step 2 using the methodologies listed below.
  - f) After each BAT, the facility shall adjust the calculated Er values for NO<sub>x</sub>, if the percentage difference (PD) as calculated in 5.I.ii. is a negative value. If the percentage difference (PD) in 5.I.ii. is positive, facility shall not make any adjustment. Adjusted Er = Er \* AF
  - g) If adjustments are needed for more than one of the initial quarterly BATs, the total adjustment will be calculated as sum of the absolute value of the new percentage difference and the previous adjustment factor. If the percentage difference in I.ii (shown above) is positive, facility shall not make any change to the adjustment factor. New adjustment factor = old adjustment factor + abs(PD)
  - h) In subsequent years, during the annual BAT<sup>(1)</sup>, the facility shall compare the adjusted Er value, in lb/hr, for NO<sub>x</sub>, as specified in I.ii (shown above) Steps 1 and 2, with the BAT test result. The facility shall calculate a percentage difference using the equation specified in I.ii (shown above). If the percentage difference shows that the facility is under-reporting (i.e. negative value), an adjustment will be made using the adjustment factor in I.ii (shown above) and the adjusted Er equation in I.iii.
  - i) If any adjustment factors are utilized by the facility, the CEM quarterly report submission will include an explanation of the adjustment factor and start date for using this factor. The total adjustment factor utilized after completion of four consecutive quarterly BATs will be detailed in the annual tons per year report submitted to the department with the 4<sup>th</sup> Quarter CEM report. Adjustment factor information will also be included as part of the bias adjustment test report submission.
  - j) If the facility would like to remove or decrease the adjustment factor, four consecutive quarterly BATs will be completed per the procedures above and the adjustment factor (if necessary) will be recalculated per the procedures of this permit.

- iv. The facility shall calculate daily emissions in pounds per day, using the adjusted Er value as specified in I.i, ii and iii.
  - v. Using the daily values in pounds per day, the facility shall convert the calculated values to tons per year (tpy), on a rolling 365-day basis. The tpy values shall be submitted to the department at the end of each year with the 4<sup>th</sup> quarter CEM report.
  - vi. The Department shall evaluate compliance with tpy emissions limits in Section 1 using the pound per day and ton per year results submitted by the facility for NOx each year.
  - vii. The facility shall submit the following within 45-days of BAT test completion to the Department for four consecutive quarters:
    - b) The BAT test result in lb/hr and the corresponding calculated Er value in lb/hr, as specified in I.i, ii and iii., for the duration of the BAT test.
  - viii. If the facility is unable to demonstrate that the facility's calculation, using Method 19, for four (4) consecutive quarters (out of the eight (8) consecutive quarters allotted for achieving compliance), is underreporting the Adjusted Er by less than 10.0% when compared to the BAT test results; then installation, calibration, maintenance and operation of a flow meter shall be required within six months to calculate lb/hr emission rate of NOx. This flow meter shall be capable of meeting EPA Performance Specification 6, (40 CFR Part 60, Appendix B).
  - ix. The facility shall be required to submit quarterly reports for all pollutants monitored using the CEMS. The NOx emission rate, Er, included in these reports shall reflect any applicable adjustment factors. If an adjustment factor is applied to only a portion of the quarter, the cover letter to the CEM quarterly report will include the start date for the adjustment factor.
  - x. On a daily basis, the facility shall calculate and record the combined 30-day rolling average hourly NOx emissions, in pounds per hour, for EP S10 and EP S10B.
- J. The permittee shall use the NOx CEM data, the natural gas fuel usage records, and the equation below to calculate and record the monthly NOx emissions from the TO/HRSGs. The permittee shall maintain records of all data used to perform the calculations:
- ii. 
$$NO_x \left( \frac{ton}{month} \right) = [S10B_{NO_x}] \times \left[ \frac{1.2 \times NG_{TO/HRSG}}{(1.2 \times NG_{TO/HRSG}) + (NG_{Dryers})} \right]$$

Where:

    - NOx (ton/month) = NOx from TO/HRSG ((EU B10B)
    - S10B<sub>NOx</sub> = total NOx emissions from stack S10B as measured by the CEM, in tons
    - NG<sub>TO/HRSG</sub> = amount of natural gas combusted in the TO/HRSG (EU B10B) in MMBtu
    - NG<sub>Dryers</sub> = amount of natural gas combusted in the Dryers (EU P10C and EU P10D) in MMBtu
    - 1.2 = compliance margin
- K. The permittee shall use the equation in condition J (above) to determine the 12-month rolling total emissions of NOx from the fossil fuel fired boilers EU B10A/CE C10 and EU B10B/CE C10B for each calendar month. The 12-month rolling total shall be calculated at the end of each month. As an alternative to the equation in J, shown above, the permittee may assume that all NOx emissions from stacks S10 and S10B are from the TO/HRSGs.

- L. The permittee shall monitor the natural gas input to the dryers and the TO/HRSG separately.
  - ii. Record the amount of natural gas input to the dryers and the TO/HRSG in MMBtu/month.

- (2) The initial BAT shall be completed quarterly to establish the adjustment factor (AF); then BAT shall be completed annually to retain the accuracy of the adjustment factor used by the facility. The annual BAT can be completed as part of the RATA process

Authority for Requirement: DNR Construction Permit 05-A-238-S9

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 125

Stack Opening (inches, dia.): 84

Exhaust Flow Rate (scfm): 68,300

Exhaust Temperature (°F): 336

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 05-A-238-S9

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Compliance Demonstration(s)**

**Compliance Demonstration Table**

<b>Pollutant</b>	<b>Compliance Methodology</b>	<b>Frequency</b>	<b>Test Run Time</b>	<b>Test Method</b>
NO <sub>x</sub>	CEMS and Recordkeeping	Continuous	Footnote <sup>(1)</sup>	40 CFR 60, Appendix A, Method 7E
VOC	Stack Testing	Annual	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

Single HAP	Stack Testing	Annual <sup>(2)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Total HAP	Stack Testing	Annual	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

<sup>(1)</sup> Compliance shall be demonstrated continuously through the use of a Continuous Emissions Monitoring System (CEMS). Four quarterly Bias Adjustment Tests (BAT) shall be conducted in a 12-month period with a minimum of 30 days between tests. The emission rate shall be measured in pounds/hour using the following test method: 40 CFR 60, Appendix A, Methods 1 - 4, Method 7E. BATs shall be conducted while the unit is operating, at a minimum, of at least 80% of historical maximum rated capacity demonstrated by the facility.

<sup>(2)</sup> Annual stack testing shall be conducted for VOC, Total HAP, and Single HAP. Acrolein, acetaldehyde, formaldehyde, and methanol shall be tested for specifically. The specified HAP compounds that test below detection limits shall be assumed to be emitting at a rate equal to the detection limit.

### Continuous Emission Monitoring Systems (CEMS)

A. The following requirements shall apply to all CEMS for NSPS emission standards in this permit:

- i. The owner or operator shall demonstrate compliance with the nitrogen oxide emission through the use of a continuous emission monitoring system (CEMS). The owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the emission point to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.
- ii. The 1-hour average NO<sub>x</sub> emission rates measured by the NO<sub>x</sub> CEM required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emissions rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).
- iii. Per 40 CFR 60.49b(f), when NO<sub>x</sub> emissions are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, 40 CFR Part 60 Appendix A Method 7, 40 CFR Part 60 Appendix A Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days
- iv. The NO<sub>x</sub> CEMS shall be operated and data collected as required under 40 CFR §60.48b(c), (d), (e), and (f).

B. The following requirements shall apply to all CEMS for non-NSPS emission standards in

this permit:

- i. The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission units associated with EP S10, except for CEMS breakdowns and repairs. Data is recorded during calibration checks and zero and span adjustments.
  - ii. The 1-hour average NO<sub>x</sub> emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards in this permit. At least two data points must be used to calculate each 1-hour average.
  - iii. For each hour of missing emission data (NO<sub>x</sub>), the owner or operator shall substitute data by:
    - a) If the monitor data availability is equal to or greater than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
      - (i) For a missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
      - (ii) For a missing data period greater than 24 hours, substitute the greater of:
        - The 90<sup>th</sup> percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or,
        - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
    - b) If the monitor data availability is at least 90.0% but less than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
      - (i) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
      - (ii) For a missing data period of more than 8 hours, substitute the greater of:
        - The 95<sup>th</sup> percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or,
        - The average of the hourly concentration recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
    - c) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.
- C. The applicable requirements in Appendix F to Part 60 – *Quality Assurance Procedures* shall apply to all CEMS used for determination of compliance with the applicable emission limits in this permit, including:
- i. The owner or operator shall develop and implement a quality control (QC) program.

As a minimum, each QC program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

- a) Calibration of the CEMS;
  - b) Calibration drift determination and adjustment of the CEMS;
  - c) Preventive maintenance of the CEMS (including spare parts inventory);
  - d) Data recording, calculations, and reporting;
  - e) Accuracy audit procedures including sampling and analysis methods; and,
  - f) Program of corrective action for malfunctioning CEMS.
- ii. Whenever excessive inaccuracies occur for two consecutive quarters, the owner or operator shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.
- iii. The owner or operator shall keep on-site a copy of these written procedures and shall make them available for inspection by the Department.

The owner or operator shall conduct a Relative Accuracy Test Audit (RATA) at least once every four calendar quarters and shall submit RATA reports to the Department as indicated in this permit (see Condition 8 – *Notification, Reporting, and Recordkeeping*).

Authority for Requirement: DNR Construction Permit 05-A-238-S9

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S15**

Associated Equipment

Associated Emission Unit ID Numbers: See Table Below

**Emission Unit(s) and Control Equipment:**

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
01	Grain Receiving Pit #1	30,000 bu/hr	Baghouse (CE C15)
02	Grain Receiving Pit #2	15,000 bu/hr	
03	Receiving Elevator #1	15,000 bu/hr	
04	Receiving Elevator #2	15,000 bu/hr	
05	Scalping Bin	16,550 bushels	

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr	tons/yr	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.97 <sup>(1)</sup>	17.13 <sup>(2)</sup>	0.1 gr/dscf	567 IAC 23.4(7), 03-A-1314-S5
PM <sub>10</sub>	NA	7.12 <sup>(2)</sup>	NA	03-A-1314-S5
PM <sub>2.5</sub>	NA	4.73 <sup>(2)</sup>	NA	03-A-1314-S5
Opacity	NA	NA	40% <sup>(3)</sup>	567 IAC 23.3(2)"d"

<sup>(1)</sup> This limit applies to EP S15 only.

<sup>(2)</sup> This limit applies to grain receiving and includes emissions from EP S15 and uncaptured emissions from grain receiving, assuming that 5% of emissions are uncaptured. The compliance demonstration methodology is listed in Operating Limits, below.

<sup>(3)</sup> An exceedance of the indicator opacity of ‘No Visible Emissions’ will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The facility shall not receive more than 481,800,000 bushels of grain in any rolling 12-month period. The owner or operator shall:
  - a. On a monthly basis, record the total amount grain received at the facility, in bushels; and
  - b. On a monthly basis, calculate and record the rolling 12-month total, in bushels.
- B. The owner or operator shall maintain the Baghouse (CE C15) according to the facility's operations and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE C15). This log shall include, but is not necessarily limited to:
  - a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE C15);
  - b. Any issues identified during the inspection and the date each issue was resolved;
  - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
  - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 03-A-1314-S5

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 40

Stack Opening (inches, dia.): 30

Exhaust Flow Rate (scfm): 29,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-1314-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S30**

Associated Equipment

Associated Emission Unit ID Numbers: See Table Below

**Emission Unit(s) and Control Equipment:**

<b>EU ID</b>	<b>Description</b>	<b>Maximum Rated Capacity</b>	<b>Control Equipment Description and ID</b>
EU P30	Clean Grain Day Bin	7,500 bushels	Baghouse (CE C30)
EU P31	Hammermill #1	1,250 bu/hr	
EU P32	Hammermill #2	1,250 bu/hr	
EU P33	Hammermill #3	1,250 bu/hr	
EU P34	Hammermill #4	1,250 bu/hr	
EU P35	Screw Conveyor #1	3,000 bu/hr	
EU P36	Screw Conveyor #2	3,000 bu/hr	

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 03-A-1315-S6  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.12 lb/hr: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 03-A-1315-S6  
567 IAC 23.4(7)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall operate and maintain the Baghouse (CE C30) according to the facility's operation and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE-C30). This log shall include, but is not necessarily limited to:
  - a. The date any inspection and/or maintenance was performed on the Baghouse (CE C30);
  - b. Any issues identified during the inspection;
  - c. Any issues addressed during the maintenance activities; and
  - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 03-A-1315-S6

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 40

Stack Opening (inches, dia.): 30

Exhaust Flow Rate (scfm): 14,210

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-1315-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S40**

Associated Equipment

Associated Emission Unit ID Numbers: EU P40  
Emissions Control Equipment ID Number: CE C40  
Emissions Control Equipment Description: Scrubber

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Emission Unit vented through this Emission Point: EU P40  
Emission Unit Description: Fermentation P40  
Raw Material/Fuel: Beer  
Rated Capacity: Fermenters #1 - #7 (730,000 gallons each), Beerwell (985,000 gallons)

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**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:*

<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
Particulate Matter (PM) – State	0.26	NA	0.1 gr/dscf	567 IAC 23.3(2)"a", 03-A-1316- S8
PM <sub>10</sub>	0.26	NA	NA	03-A-1316- S8
Opacity	NA	NA	40% <sup>(1)</sup>	567 IAC 23.3(2)"d"
Volatile Organic Compounds (VOC)	20.0 <sup>(2)</sup>	NA	NA	03-A-1316- S8
Acetaldehyde	1.42 <sup>(2)</sup>	NA	NA	
(Single HAP)	0.36 <sup>(2)</sup>	NA	NA	
(Total HAP)	2.14 <sup>(2)</sup>	NA	NA	

<sup>(1)</sup> An exceedance of the indicator opacity of ‘No Visible Emissions’ will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> This limit is a combined limit for Fermentation P40 (EP S40) and Fermentation P40B (EP S40B).

Authority for Requirement: DNR Construction Permit 03-A-1316-S8

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall inspect and maintain the Scrubber (CE40) according to the facility's operation and maintenance plan. The owner or operator shall maintain a record of all inspections and maintenance activities and any actions resulting from the inspection and maintenance of the Scrubber (CE40).
- B. The owner or operator shall maintain the pressure drop across the Scrubber (CE40) between 0.25 and 11.8 inches water column. The owner or operator shall collect and record the pressure drop, in inches water column, on a continuous basis. The owner or operator shall calculate and record the rolling 3-hour average pressure drop, in inches water column. This requirement shall not apply on days that the Scrubber (CE40) is not in operation. If the rolling 3-hour average pressure drop is outside the required range, the owner or operator shall record the date, the actions taken to correct the situation, and the date and time that the pressure drop is back within the required range. All excess emission reporting shall be conducted in accordance with G14 of General Conditions.
- C. The owner or operator shall add scrubber liquid (water) and any additive added to the Scrubber (CE40) to enhance the removal efficiency of the Scrubber (CE40) at the same rates they were added during the most recent accepted compliance test, which demonstrated compliance with all applicable emission limits. The owner or operator shall record the scrubber liquid (water) and additive flow rate on a continuous basis. If the scrubber liquid (water) or additive flow rate deviates below the minimum flow rate required on a 3-hour average, the owner or operator shall record the time and date, the actions taken to correct the situation, and the date and time that the flow rate is above the minimum flow rate required. All excess emission reporting shall be conducted in accordance with G14 of General Conditions.

Authority for Requirement: DNR Construction Permit 03-A-1316-S8

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 70

Stack Opening (inches, dia.): 20

Exhaust Flow Rate (scfm): 7,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-1316-S8

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Compliance Demonstration(s)**

**Compliance Demonstration Table**

<b>Pollutant</b>	<b>Compliance Methodology</b>	<b>Frequency</b>	<b>Test Run Time</b>	<b>Test Method</b>
VOC	Stack Testing <sup>(1)</sup>	Semi-Annual <sup>(2)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Acetaldehyde	Stack Testing <sup>(1)</sup>	Semi-Annual <sup>(2)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP	Stack Testing <sup>(1), (3)</sup>	Semi-Annual <sup>(2)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

<sup>(1)</sup> Testing of Fermentation P40 (EP S40) and Fermentation P40B (EP S40B) shall be performed simultaneously.

<sup>(2)</sup> Testing shall be performed with a minimum of 6 months between tests. At least one test shall be completed during the months of June, July, or August. If four consecutive tests demonstrate emissions that are less than 90% of the applicable emissions limits, the owner or operator may submit a request to reduce the frequency of the stack testing.

<sup>(3)</sup> Acrolein, formaldehyde, and methanol shall be tested for specifically.

*The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S40B**

Associated Equipment

Associated Emission Unit ID Numbers: EU P40B  
Emissions Control Equipment ID Number: CE C40B  
Emissions Control Equipment Description: Scrubber

Emission Unit vented through this Emission Point: EU P40B  
Emission Unit Description: Fermentation P40B  
Raw Material/Fuel: Beer  
Rated Capacity: Fermenters #1 - #7 (730,000 gallons each), Beerwell (985,000 gallons)

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:*

<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
Particulate Matter (PM) – State	0.26	NA	0.1 gr/dscf	567 IAC 23.3(2)"a", 05-A-239-S7
PM <sub>10</sub>	0.26	NA	NA	05-A-239-S7
Opacity	NA	NA	40% <sup>(1)</sup>	567 IAC 23.3(2)"d"
Volatile Organic Compounds (VOC)	20.0 <sup>(2)</sup>	NA	NA	05-A-239-S7
Acetaldehyde	1.42 <sup>(2)</sup>	NA	NA	
(Single HAP)	0.36 <sup>(2)</sup>	NA	NA	
(Total HAP)	2.14 <sup>(2)</sup>	NA	NA	

<sup>(1)</sup> An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> This limit is a combined limit for Fermentation P40 (EP S40) and Fermentation P40B (EP S40B).

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in

an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall inspect and maintain the Scrubber (CE40B) according to the facility's operation and maintenance plan. The owner or operator shall maintain a record of all inspections and maintenance activities and any actions resulting from the inspection and maintenance of the Scrubber (CE40B).
- B. The owner or operator shall maintain the pressure drop across the Scrubber (CE40B) between 0.25 and 11.8 inches water column. The owner or operator shall collect and record the pressure drop, in inches water column, on a continuous basis. The owner or operator shall calculate and record the rolling 3-hour average pressure drop, in inches water column. This requirement shall not apply on days that the Scrubber (CE40B) is not in operation. If the rolling 3-hour average pressure drop is outside the required range, the owner or operator shall record the date, the actions taken to correct the situation, and the date and time that the pressure drop is back within the required range. All excess emission reporting shall be conducted in accordance with G14 of General Conditions.
- C. The owner or operator shall add scrubber liquid (water) and any additive added to the Scrubber (CE40B) to enhance the removal efficiency of the Scrubber (CE40B) at the same rates they were added during the most recent accepted compliance test, which demonstrated compliance with all applicable emission limits. The owner or operator shall record the scrubber liquid (water) and additive flow rate on a continuous basis. If the scrubber liquid (water) or additive flow rate deviates below the minimum flow rate required, the owner or operator shall record the time and date, the actions taken to correct the situation, and the date and time that the flow rate is above the minimum flow rate required. All excess emission reporting shall be conducted in accordance with G14 of General Conditions.

Authority for Requirement: DNR Construction Permit 05-A-239-S7

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 70

Stack Opening (inches, dia.): 20

Exhaust Flow Rate (scfm): 7,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 05-A-239-S7

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department within thirty (30) days of discovery and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Compliance Demonstration(s)**

**Compliance Demonstration Table**

<b>Pollutant</b>	<b>Compliance Methodology</b>	<b>Frequency</b>	<b>Test Run Time</b>	<b>Test Method</b>
VOC	Stack Testing <sup>(1)</sup>	Semi-Annual <sup>(2)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Acetaldehyde	Stack Testing <sup>(1)</sup>	Semi-Annual <sup>(2)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP	Stack Testing <sup>(1), (3)</sup>	Semi-Annual <sup>(2)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

- <sup>(1)</sup> Testing of Fermentation P40 (EP S40) and Fermentation P40B (EP S40B) shall be performed simultaneously.
- <sup>(2)</sup> Testing shall be performed with a minimum of 6 months between tests. At least one test shall be completed during the months of June, July, or August. If four consecutive tests demonstrate emissions that are less than 90% of the applicable emissions limits, the owner or operator may submit a request to reduce the frequency of the stack testing.
- <sup>(3)</sup> Acrolein, formaldehyde, and methanol shall be tested for specifically.

*The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S90**

Associated Equipment

Associated Emission Unit ID Numbers: EU S90  
Emissions Control Equipment ID Number: CE C90  
Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: EU S90  
Emission Unit Description: DDGS Loading  
Raw Material/Fuel: DDGS  
Rated Capacity: 200 Tons/hr at 34 lb/cf (Based on Plant-Wide DDGS Limit of 369,643 Tons/Year)

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit: 40% <sup>(1)</sup>  
Authority for Requirement: DNR Construction Permit 03-A-1318-S1  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>10</sub>)  
Emission Limit: 0.43 lb/hr  
Authority for Requirement: DNR Construction Permit 03-A-1318-S1

Pollutant: Particulate Matter (PM)  
Emission Limit: 0.43 lb/hr, 0.1 gr/dscf  
Authority for Requirement: DNR Construction Permit 03-A-1318-S1  
567 IAC 23.4(7)

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

Operating limits for this emission unit shall be:

- A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

**Operating Condition Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall keep records of control equipment inspections and repairs.

Authority for Requirement: DNR Construction Permit 03-A-1318-S1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 40

Stack Opening (inches, dia.): 16

Exhaust Flow Rate (scfm): 3,750

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-1318-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S91**

Associated Equipment

Associated Emission Unit ID Numbers: EU S91  
Emissions Control Equipment ID Number: CE C91  
Emissions Control Equipment Description: Fabric Filter System

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Emission Unit vented through this Emission Point: EU S91  
Emission Unit Description: DDGS Loading  
Raw Material/Fuel: DDGS  
Rated Capacity: 200 Tons/hr at 34 lb/cf (Based on Plant-wide DDGS Limit of 369,643 Tons/year)

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit: 40% <sup>(1)</sup>  
Authority for Requirement: DNR Construction Permit 06-A-647-S1  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>10</sub>)  
Emission Limit: 0.43 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-647-S1

Pollutant: Particulate Matter (PM)  
Emission Limit: 0.43 lb/hr, 0.1 gr/dscf  
Authority for Requirement: DNR Construction Permit 06-A-647-S1  
567 IAC 23.4(7)

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

- 1. The control equipment shall be operated and maintained per the manufacturer’s instructions and specifications.

**Operating Condition Monitoring**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

- 1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: DNR Construction Permits 06-A-647-S1

**Emission Point Characteristics**

*The emission points shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 25

Stack Opening (inches, dia.): 14

Exhaust Flow Rate (scfm): 5,000

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits 06-A-647-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S70**

Associated Equipment

Associated Emission Unit ID Numbers: EU P70  
Emissions Control Equipment ID Number: CE C70  
Emissions Control Equipment Description: DDG Cooler Baghouse 1

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Emission Unit vented through this Emission Point: EU P70  
Emission Unit Description: DDGS Cooler  
Raw Material/Fuel: DDGS  
Rated Capacity: 21.1 Tons/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:*

<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
Particulate Matter (PM) – State	1.26	NA	0.1 gr/scf	567 IAC 23.4(7)
PM <sub>10</sub>	1.26	NA	NA	03-A-1317-S5
Opacity	NA	NA	40% <sup>(1)</sup>	567 IAC 23.3(2)"d"
Volatile Organic Compounds (VOC)	3.49	NA	NA	03-A-1317-S5
Acetaldehyde	0.10	NA	NA	
(Single HAP)	0.13 <sup>(2)</sup>	NA	NA	
(Total HAP)	0.64 <sup>(3)</sup>	NA	NA	

- <sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
- <sup>(2)</sup> Emission limit applies to any single HAP emitted from this process except acetaldehyde, which has a specific emission limit included in this permit. The specific HAPs, which are expected to be the major constituents of the HAP emissions from this operation, include methanol, acrolein, and formaldehyde.
- <sup>(3)</sup> Limit applies to the combined emissions from S70 and S70B.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall inspect and maintain the control equipment according to the facility's (plant #42-01-019) operation and maintenance plan. The owner or operator shall keep records of control equipment inspections and repairs.
- B. Plant-wide, DDGS Production shall not exceed 369,643 tons per rolling twelve (12) month rolling period. Plant-wide, for the first twelve (12) months of operation, determine the amount of DDGS for each month of operation. After the first twelve (12) months of operation, determine the cumulative amount of DDGS on a rolling-12-month basis for each month of operation.

Authority for Requirement: DNR Construction Permit 03-A-1317-S5

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 135.5

Stack Opening, (inches, dia.): 40

Exhaust Flow Rate (scfm): 28,000

Exhaust Temperature (°F): 108

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-1317-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S70B**

Associated Equipment

Associated Emission Unit ID Numbers: EU P70B  
Emissions Control Equipment ID Number: CE C70B  
Emissions Control Equipment Description: DDG Cooler Baghouse 2

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Emission Unit vented through this Emission Point: EU P70B  
Emission Unit Description: DDGS Cooler  
Raw Material/Fuel: DDGS  
Rated Capacity: 21.1 Tons/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:*

<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
Particulate Matter (PM) – State	1.26	NA	0.1 gr/scf	567 IAC 23.4(7)
PM <sub>10</sub>	1.26	NA	NA	05-A-240-S4
Opacity	NA	NA	40% <sup>(1)</sup>	567 IAC 23.3(2)"d"
Volatile Organic Compounds (VOC)	3.49	NA	NA	05-A-240-S4
Acetaldehyde	0.10	NA	NA	
(Single HAP)	0.13 <sup>(2)</sup>	NA	NA	
(Total HAP)	0.64 <sup>(3)</sup>	NA	NA	

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> Emission limit applies to any single HAP emitted from this process except acetaldehyde, which has a specific emission limit include in this permit. The specific HAPs, which are expected to be the major constituents of the HAP emissions from this operation, include methanol, acrolein, and formaldehyde.

<sup>(3)</sup> Limit applies to the combined emissions from S70 and S70B.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall inspect and maintain the control equipment according to the facility's (plant #42-01-019) operation and maintenance plan. The owner or operator shall keep records of control equipment inspections and repairs.
- B. Plant-wide, DDGS Production shall not exceed 369,643 tons per rolling twelve (12) month rolling period. Plant-wide, for the first twelve (12) months of operation, determine the amount of DDGS for each month of operation. After the first twelve (12) months of operation, determine the cumulative amount of DDGS on a rolling-12-month basis for each month of operation.

Authority for Requirement: DNR Construction Permit 05-A-240-S4

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 135.5

Stack Opening, (inches, dia.): 40

Exhaust Flow Rate (scfm): 28,000

Exhaust Temperature (°F): 108

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 05-A-240-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP F80**

Associated Equipment

Associated Emission Unit ID Numbers: EU P80  
Emissions Control Equipment ID Number: CE C80  
Emissions Control Equipment Description: Drift Eliminator

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Emission Unit vented through this Emission Point: EU P80  
Emission Unit Description: Cooling Tower  
Raw Material/Fuel: Water  
Rated Capacity: 1.26 MMGal/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 05-A-241-S3  
567 IAC 23.3(2) "d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" (No VE) will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 1.60 lb/hr <sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 05-A-241-S3

Pollutant: Particulate Matter (PM)

Emission Limit: 1.60 lb/hr <sup>(2)</sup>, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 05-A-241-S3  
567 IAC 23.3(2)"a"

<sup>(2)</sup> PM and PM<sub>10</sub> are assumed to be equivalent. The limit is based on a drift loss of 0.005% and total dissolved solids (TDS) limit of 3000 parts per million by weight (3000 mg/L). Compliance demonstration is based on mass balance approach (see Operating Requirements and Associated Recordkeeping, below).

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements and Associated Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

- A. The circulating water in the cooling tower shall not exceed 3000 parts per million (ppm) total dissolved solids (TDS).
  - i. Monitoring of the TDS shall be conducted on a monthly schedule.
  - ii. The owner or operator shall maintain records on-site of the TDS concentration in the cooling tower circulating water. Records shall also be kept of the dates of measurement and the methods used to determine the concentration of the TDS in the cooling water.
  
- B. The Mist Eliminator (CE 80) shall be designed to meet a control efficiency of 0.005% (gallons of drift per gallon of cooling water flow) or better.
  - i. The cooling tower shall be operated and maintained per the facility's (Plant ID 42-01-019) operating and maintenance plans.
  - ii. The owner or operator shall maintain records of all maintenance and repair to the cooling tower.
  
- C. The owner or operator shall use no water treatment chemicals that contain chromium compounds.
  - i. The owner or operator shall maintain MSDS, or equivalent technical sheets, for all water treatment chemicals used at the facility.

Authority for Requirement: DNR Construction Permit 05-A-241-S3

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 30

Stack Opening (inches, dia.): 216

Exhaust Flow Rate (scfm): four cells @ 389,000 scfm each

Exhaust Temperature (°F): 84

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 05-A-241-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within

thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Compliance Demonstration(s)**

**Compliance Demonstration Table**

<b>Pollutant</b>	<b>Compliance Methodology</b>	<b>Frequency</b>	<b>Test Run Time</b>	<b>Test Method</b>
PM – State	See Footnote (1)	See Footnote (2)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	See Footnote (1)	See Footnote (2)	1 hour	40 CFR 51, Appendix M, 201A with 202

<sup>(1)</sup> The facility shall conduct water sampling for Total Dissolved Solids (TDS). See Operating Requirements and Associated Recordkeeping, above for TDS limits and testing requirements.

<sup>(2)</sup> A minimum of one (1) sampling analysis shall be conducted each month. Should more than one (1) analysis be conducted the average of the analyses shall be used to demonstrate compliance with the TDS limit.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP F80B**

Associated Equipment

Associated Emission Unit ID Numbers: EU P80B  
Emissions Control Equipment ID Number: CE C80B  
Emissions Control Equipment Description: Drift Eliminator

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Emission Unit vented through this Emission Point: EU P80B  
Emission Unit Description: Cooling Tower  
Raw Material/Fuel: Water  
Rated Capacity: 1.26 MMGal/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 05-A-242-S3  
567 IAC 23.3(2) "d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" (No VE) will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 1.60 lb/hr <sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 05-A-242-S3

Pollutant: Particulate Matter (PM)

Emission Limit: 1.60 lb/hr <sup>(2)</sup>, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 05-A-242-S3  
567 IAC 23.3(2)"a"

<sup>(2)</sup> PM and PM<sub>10</sub> are assumed to be equivalent. The limit is based on a drift loss of 0.005% and total dissolved solids (TDS) limit of 3000 parts per million by weight (3000 mg/L). Compliance demonstration is based on mass balance approach (see Operating Requirements and Associated Recordkeeping, below).

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements and Associated Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

- A. The circulating water in the cooling tower shall not exceed 3000 parts per million (ppm) total dissolved solids (TDS).
  - i. Monitoring of the TDS shall be conducted on a monthly schedule.
  - ii. The owner or operator shall maintain records on-site of the TDS concentration in the cooling tower circulating water. Records shall also be kept of the dates of measurement and the methods used to determine the concentration of the TDS in the cooling water.
  
- B. The Mist Eliminator (CE 80B) shall be designed to meet a control efficiency of 0.005% (gallons of drift per gallon of cooling water flow) or better.
  - i. The cooling tower shall be operated and maintained per the facility's (Plant ID 42-01-019) operating and maintenance plans.
  - ii. The owner or operator shall maintain records of all maintenance and repair to the cooling tower.
  
- C. The owner or operator shall use no water treatment chemicals that contain chromium compounds.
  - i. The owner or operator shall maintain MSDS, or equivalent technical sheets, for all water treatment chemicals used at the facility.

Authority for Requirement: DNR Construction Permit 05-A-242-S3

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 30

Stack Opening (inches, dia.): 216

Exhaust Flow Rate (scfm): 4 cells @ 382,350 scfm each

Exhaust Temperature (°F): 84

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 05-A-242-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall

submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Compliance Demonstration(s)**

**Compliance Demonstration Table**

<b>Pollutant</b>	<b>Compliance Methodology</b>	<b>Frequency</b>	<b>Test Run Time</b>	<b>Test Method</b>
PM – State	See Footnote (1)	See Footnote (2)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	See Footnote (1)	See Footnote (2)	1 hour	40 CFR 51, Appendix M, 201A with 202

<sup>(1)</sup> The facility shall conduct water sampling for Total Dissolved Solids (TDS). See Operating Requirements and Associated Recordkeeping, above for TDS limits and testing requirements.

<sup>(2)</sup> A minimum of one (1) sampling analysis shall be conducted each month. Should more than one (1) analysis be conducted the average of the analyses shall be used to demonstrate compliance with the TDS limit.

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP T60A, EP T60B, EP T61, EP T62**

Associated Equipment

Associated Emission Unit ID Numbers: EU T60A, EU T60B, EU T61, EU T62

Emissions Control Equipment ID Number: CE T60A, CE T60B, CE T61, CE T62

Emissions Control Equipment Description: Internal Floating Roof

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<b>Emission Point</b>	<b>Emission Unit vented through this Emission Point</b>	<b>Emission Unit Description</b>	<b>Raw Material/Fuel</b>	<b>Rated Capacity (gallons)</b>
T60A	T60A	Denatured Ethanol Storage Tank	Denatured Ethanol	750,000
T60B	T60B	Denatured Ethanol Storage Tank	Denatured Ethanol	750,000
T61	T61	Denatured Ethanol Storage Tank	Denatured Ethanol	750,000
T62	T62	Denatured Ethanol Storage Tank	Denatured Ethanol	750,000

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-357-S2, 06-A-358-S2,  
03-A-1321-S3, 03-A-1322-S3  
567 IAC 23.3(2) "d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Limits**

Operating limits for this emission unit shall be:

- A. The tank shall only store denatured ethanol.
- B. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

### **Reporting & Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall keep records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.

Authority for Requirement: DNR Construction Permits 06-A-357-S2, 06-A-358-S2,  
03-A-1321-S3, 03-A-1322-S3

### **NSPS and NESHAP Applicability**

Storage tanks T60A, T60B, T61 and T62 are subject to the requirement of the New Source Performance Standard (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984] (40 CFR 60 Subpart Kb; 567 IAC 23.1(2)"ddd") and the General Provision found in 40 CFR 60 Subpart A.

Authority for Requirement: DNR Construction Permits 06-A-357-S2, 06-A-358-S2,  
03-A-1321-S3, 03-A-1322-S3

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): T60A; 52.5, T60B: 52.5, T61: 47 & T62: 47

Stack Opening, (inches, dia.): 5.6" X 8" (Note: Four (4) stacks, each 5.6" X 8")

Exhaust Flow Rate (scfm): See Note

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits 06-A-357-S2, 06-A-358-S2,  
03-A-1321-S3, 03-A-1322-S3

Note: The airflow from these units is from the working and standing losses of the tanks. This is variable and will depend on the ambient and operational conditions at the time.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed *below*.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP T63 & T65**

Associated Equipment

Associated Emission Unit ID Numbers: EU T63 & T65

Emissions Control Equipment ID Number: CE T63 & CE T65

Emissions Control Equipment Description: Internal Floating Roof

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<b>Emission Point</b>	<b>Emission Unit vented through this Emission Point</b>	<b>Emission Unit Description</b>	<b>Raw Material/Fuel</b>	<b>Rated Capacity</b>
T63 & T65	T63 & T65	200 Proof Ethanol Storage Tanks	200 Proof Ethanol	100,000 gallons (each) 157,680,000 gallons/yr (combined)

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 03-A-1323-S4 & 03-A-1325-S4  
567 IAC 23.3(2) "d"

<sup>(1)</sup> An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall store only anhydrous ethanol in the 200 Proof Ethanol Tanks (EU T63 and EU T65).
- B. The owner or operator shall follow all applicable internal floating roof requirements listed in 40 CFR §60.112b(a)(1) and all applicable inspection requirements in 40 CFR §60.113b(a). The owner or operator shall maintain the following records:
  - a. Control equipment installation and inspection records, as specified in 40 CFR §60.115b(a);
  - b. Records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source, as specified in 40 CFR §60.116b(b); and
  - c. Any additional applicable records specified in 40 CFR §60.116b.

Authority for Requirement: DNR Construction Permits 03-A-1323-S4 & 03-A-1325-S4

**NSPS and NESHAP Applicability**

Storage tanks T63 and T65 are subject to the requirement of the New Source Performance Standard (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984] (40 CFR 60 Subpart Kb; 567 IAC 23.1(2)"ddd") and the General Provision found in 40 CFR 60 Subpart A.

Authority for Requirement: DNR Construction Permits 03-A-1323-S4 & 03-A-1325-S4

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 29.5

Stack Opening, (inches, dia.): Four stacks, each 5.6" x 8"

Exhaust Flow Rate (scfm): Working and standing losses

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits 03-A-1323-S4 & 03-A-1325-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed *below*.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP T64**

Associated Equipment

Associated Emission Unit ID Numbers: EU T64  
Emissions Control Equipment ID Number: CE T64  
Emissions Control Equipment Description: Internal Floating Roof

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<b>Emission Point</b>	<b>Emission Unit vented through this Emission Point</b>	<b>Emission Unit Description</b>	<b>Raw Material/Fuel</b>	<b>Rated Capacity (gallons)</b>
T64	T64	Denaturant Storage Tank	Denaturant	100,000

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 03-A-1324-S3  
567 IAC 23.3(2) "d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

Operating limits for this emission unit shall be:

- A. The tank shall only store denaturant.
- B. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

**Operating Condition Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall keep records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.

Authority for Requirement: DNR Construction Permits 03-A-1324-S3

**New Source Performance Standards (NSPS)**

This unit is subject to the requirement of the New Source Performance Standard (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984] (40 CFR 60 Subpart Kb; 567 IAC 23.1(2)"ddd") and the General Provision found in 40 CFR 60 Subpart A.

Authority for Requirement: DNR Construction Permit 03-A-1324-S3

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 29.5

Stack Opening, (inches, dia.): 5.6" X 8" (Note: Four (4) stacks, each 5.6" X 8")

Exhaust Flow Rate (scfm): See Note

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits 03-A-1324-S3

Note: The airflow from this unit is from the working and standing losses of the tank. This is variable and will depend on the ambient and operational conditions at the time.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed *below*.

**Agency Approved Operation & Maintenance Plan Required?**                      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**                      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**                      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP T66**

Associated Equipment

Associated Emission Unit ID Numbers: EU T66  
Emissions Control Equipment ID Number: CE T66  
Emissions Control Equipment Description: Internal Floating Roof

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<b>Emission Point</b>	<b>Emission Unit vented through this Emission Point</b>	<b>Emission Unit Description</b>	<b>Raw Material/Fuel</b>	<b>Rated Capacity (gallons)</b>
T66	T66	190 Proof Ethanol Storage Tanks	190 Proof Ethanol	200,000

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-359-S2  
567 IAC 23.3(2) "d"

<sup>(1)</sup> An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

Operating limits for this emission unit shall be:

- A. The tank shall only store anhydrous ethanol.
- B. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

## **Operating Condition Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall keep records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b

Authority for Requirement: DNR Construction Permits 06-A-359-S2

## **New Source Performance Standards (NSPS)**

This unit is subject to the requirement of the New Source Performance Standard (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984] (40 CFR 60 Subpart Kb; 567 IAC 23.1(2)"ddd") and the General Provision found in 40 CFR 60 Subpart A.

Authority for Requirement: DNR Construction Permit 06-A-359-S2

## **Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 29

Stack Opening, (inches, dia.): 5.6" X 8" (Note: Four stacks, each 5.6" X 8")

Exhaust Flow Rate (scfm): Working and standing losses

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits 06-A-359-S2

Note: The airflow from this unit is from the working and standing losses of the tank. This is variable and will depend on the ambient and operational conditions at the time.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed *below*.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP F100**

Associated Equipment

Associated Emission Unit ID Numbers: EU F100  
Emissions Control Description: Sweeping/Flushing

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Emission Unit vented through this Emission Point: EU F100  
Emission Unit Description: Truck Traffic  
Raw Material/Fuel: Dust from Truck Traffic  
Rated Capacity: NA

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): No Visible Emissions <sup>(1)</sup>  
Authority for Requirement: DNR Construction Permit 06-A-361-S2  
567 IAC 23.3(2)"c"

<sup>(1)</sup> The permit holder shall take all precautions to prevent emissions from crossing the property line of this facility.

Pollutant: Particulate Matter (PM<sub>2.5</sub>)  
Emission Limit: 0.23 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-361-S2

Pollutant: Particulate Matter (PM<sub>10</sub>)  
Emission Limit: 0.96 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-361-S2

Pollutant: Particulate Matter (PM)  
Emission Limit: 4.84 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-361-S2

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

Operating limits for this emission unit shall be:

- A. Truck traffic on the haul road shall not exceed 10 mph. The speed limit shall be posted on the haul road.

- B. Any spills on the road shall be cleaned up immediately.
- C. Truck traffic emissions on the paved road shall be controlled by water flushing (except as noted in C (iv), shown below) and sweeping (see C of Operating Condition Monitoring and Recordkeeping (shown below)) once per day. The water spray rate shall be a minimum of 0.23 gallons per square yard.
- (i) If water flushing followed by sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7 C) only sweeping is required. Water flushing and/or sweeping is not required for days of inclement weather.
  - (ii) Water flushing and sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hr time period or the paved road(s) will not be used on a given day.
  - (iii) Water flushing and sweeping need not occur if the plant does not receive any truck traffic that day (i.e. on a weekend).
  - (iv) Daily water flushing need not occur provided that the haul road emissions do not exceed 3.4 tons PM for the last twelve months. This shall be calculated using the formula in D of Operating Condition Monitoring and Recordkeeping (shown below). Provided emissions as calculated in Section D of Operating Condition Monitoring and Recordkeeping remain below 3.4 tons for the last twelve months only daily sweeping is required. In the event that emissions exceed 3.4 tons for the last twelve months, the plant shall be required to commence daily water flushing with daily sweeping until PM emissions fall below 3.4 tons for the last twelve months.
- D. Silt load performance testing shall be completed monthly. Testing shall be completed prior to water flushing and/or sweeping for that day.
- E. The owner/operator shall record the number of trucks that load/unload material on a monthly basis. Based on the number of trucks the total Vehicle Miles Traveled (VMT) shall be calculated for that month.

### **Operating Condition Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. Record the frequency of sweeping performed on the haul roads. If the roads are not swept due to weather, a written record must be kept on site outlining the conditions.
- B. Performance testing on the haul road surface silt loading shall be completed on a monthly basis. For each performance test, silt loading sampling shall be done for at least 3 different locations. Performance testing shall be completed prior to water flushing and/or sweeping.

- C. The plant shall maintain a log for the haul roads that show the following:
- The silt content of the road for that month based on testing;
  - The date of performance testing;
  - The vehicle miles traveled (VMT) for that month;
  - Each day record whether or not water flushing and sweeping was accomplished. For days w/o water flushing and/or sweeping record the circumstances (i.e. weather condition, equipment malfunction);
  - The amount of water applied and the areas treated;
  - The operator's initials.
- D. The owner or operator shall calculate and record the monthly haul road emissions according to the following formulas, which uses the equations from AP-42 Section 13.2.1, the empirical constants, and assumes a mean vehicle weight of 28.63 tons.

$$E_{PM} = \frac{[0.337 * (sL)^{0.91}] * VMT}{2000}$$

Where            E = tons PM per month  
                       sL = road surface silt loading (g/m<sup>2</sup>) for each performance test  
                       VMT = Vehicle miles traveled

$$E_{PM10} = \frac{[0.067 * (sL)^{0.91}] * VMT}{2000}$$

Where            E = tons PM10 per month  
                       sL = road surface silt loading (g/m<sup>2</sup>) for each performance test  
                       VMT = Vehicle miles traveled

$$E_{PM2.5} = \frac{[0.0166 * (sL)^{0.91}] * VMT}{2000}$$

Where            E = tons PM2.5 per month  
                       sL = road surface silt loading (g/m<sup>2</sup>) for each performance test  
                       VMT = Vehicle miles traveled

Authority for Requirement: DNR Construction Permit 06-A-361-S2

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP F90**

Associated Equipment

Associated Emission Unit ID Number: EU F90

Emissions Control Description: None

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Emission Unit vented through this Emission Point: EU F90

Emission Unit Description: VOC Emissions from Equipment Leaks

Raw Material/Fuel: VOC Fugitive Emissions

Rated Capacity: NA

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 23.84 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-360-S1

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall maintain a record of the number and types of components used at this facility. Components shall include, but are not limited to, valves, pumps, compressor seals, and flanges. On a monthly basis, the owner or operator shall:
  - a. Calculate and record the VOC emissions from equipment leaks, in tons, during the previous month using the calculation methods outlined in EPA's document 453/R-95-017 titled *Protocol for Equipment Leak Emission Estimates* (pages 2-10 through 2-38); and
  - b. Calculate and record the rolling 12-month amount of VOC emissions from equipment leaks, in tons.
- B. The owner or operator shall comply with all applicable requirements in NSPS Subpart VV (40 CFR §60.480 – 40 CFR §60.489) including the requirement to maintain a leak detection and repair plan. The owner or operator shall comply with all recordkeeping and reporting requirements specified in 40 CFR §60.486 and 40 CFR §60.487.

Authority for Requirement: DNR Construction Permit 06-A-360-S1

**New Source Performance Standards (NSPS):**

This facility is subject to NSPS Subpart VV (*Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or before November 7, 2006*; 40 CFR §60.480 – §60.489).

Authority for Requirement: DNR Construction Permit 06-A-360-S1

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP SEP11**

Associated Equipment

Associated Emission Unit ID Number: EU 64, EU 65, EU 66 and EU 67

Emissions Control Description: Methanator Flare (CE SEP11) or Dryer A (EU P10A) and Thermal Oxidizer 1 (CE C10)

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Emission Unit vented through this Emission Point: EU 64, EU 65, EU 66, and EU 67

Emission Unit Description: Methanator #1, Methanator #2, Methanator #3, Methanator #4

Raw Material/Fuel: Process Gas Emissions

Rated Capacity: 300 Gallons per Minute (Total System Capacity)

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>, No VE <sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 03-A-1319-S6  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> The Methanator Flare (CE-SEP11) shall be operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit: 0.32 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-1319-S6

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 1.88 lbs/hr

Authority for Requirement: DNR Construction Permit 03-A-1319-S6

Pollutant: Carbon Monoxide (CO)

Emission Limit: 1.02 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-1319-S6

## **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall not operate the Methanator Flare (CE SEP11) more than 1,752 hours in any rolling 12-month period. On a monthly basis, the owner or operator shall:
  - a. Record the total number of hours that the Methanator Flare (CE SEP11) operated over the previous month; and
  - b. Calculate and record the rolling 12-month total number of hours that the Methanator Flare (CE SEP11) operated.
- B. The Methanator Flare (CE SEP11) shall be operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. The Methanator Flare (CE SEP11) shall be designed to be a smokeless operation.
- C. A flame shall be present at all times product is being loaded. The owner or operator shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame.
- D. The owner or operator shall inspect and maintain the Methanator Flare (CE SEP11) according to the facility's operation and maintenance plan. The owner or operator shall keep a log of all maintenance and inspection activities performed on the Methanator Flare (CE SEP11). This log shall include, but is not necessarily limited to:
  - a. The date any inspection and/or maintenance was performed on the Methanator Flare (CE SEP11);
  - b. Any issues identified during the inspection;
  - c. Any issues addressed during the maintenance activities; and
  - d. Identification of the staff member performing the maintenance or inspection.
- E. The Methanators (EU 64, EU 65, EU 66, and EU 67) shall be controlled by either the Methanator Flare (CE SEP11) or the Thermal Oxidizer 1 (CE C10) through Dryer A (EU P10A).

Authority for Requirement: DNR Construction Permit 03-A-1319-S6

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 32  
Stack Opening (inches, dia.): 24  
Exhaust Flow Rate (scfm): 190  
Exhaust Temperature (°F): 1,800  
Discharge Style: Vertical, unobstructed  
Authority for Requirement: DNR Construction Permit 03-A-1319-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**                      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**                      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**                      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP SEP22**

Associated Equipment

Associated Emission Unit ID Number: EU SEP22

Emissions Control Description: Truck Loadout Flare (CE C22; 5.2 MMBtu/hr)

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Emission Unit vented through this Emission Point: EU SEP22

Emission Unit Description: Truck Product Loadout

Raw Material/Fuel: Flare Gas

Rated Capacity: 1000 Gallons/Min.

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: See Footnote <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 03-A-1320-S6  
567 IAC 23.3(2)"d"

<sup>(1)</sup> The Truck Loadout Flare (CE C22) shall operate with no visible emissions, except for periods not exceeding a total of five (5) minutes during any two (2) consecutive hours.

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 03-A-1320-S6

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit: 0.36 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-1320-S6

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 8.30 tons/yr <sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 03-A-1320-S6

<sup>(2)</sup> This limit is a combined limit for the Truck Product Loadout (EP SEP22) and Rail Product Loadout (EP SEP22B). It is based on the sum of: (1) worst-case rail and truck emissions, (2) truck product loading losses, and (3) rail product loading losses. See Operational Limits & Requirements for material loadout tracking requirements.

Pollutant: Carbon Monoxide (CO)

Emission Limit: 1.64 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-1320-S6

## **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The facility-wide total amount of product (denatured and undenatured ethanol) loaded into trucks and railcars shall not exceed 125 million gallons per rolling 12-month period. The total amount of fuel ethanol product switch-loaded into trucks shall not exceed 2.5 million gallons per rolling 12-month period. On a monthly basis, the owner or operator shall:
  - a. Record the total amount of product (denatured and undenatured ethanol) loaded, in gallons, into trucks and railcars during the previous month;
  - b. Calculate and record the rolling 12-month total amount of product (denatured and undenatured ethanol) loaded, in gallons, into trucks and railcars;
  - c. Record the total amount of ethanol switch loaded, in gallons, into trucks during the previous month; and
  - d. Calculate and record the rolling 12-month total amount of ethanol switch loaded, in gallons, into trucks.
- B. The Truck Loadout Flare (CE C22) shall be used any time product is loaded into trucks. The Truck Loadout Flare (CE C22) shall:
  - a. Be designed for and operated with no visible emissions, except for periods not exceeding a total of five (5) minutes during any two (2) consecutive hours;
  - b. Be operated with a flame present at all times product is being loaded; and
  - c. Be designed to ensure smokeless operation.

The owner or operator shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame.
- C. The owner or operation shall inspect and maintain the Truck Loadout Flare (CE C22) according to the facility's operation and maintenance plan. The owner or operator shall keep a log of all maintenance and inspection activities performed on the Truck Loadout Flare (CE C22). This log shall include, but is not limited to:
  - a. The date and time any inspection and/or maintenance was performed on the control equipment;
  - b. Any issues identified during the inspection;
  - c. Any issues addressed during the maintenance activities; and
  - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 03-A-1319-S6

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 20  
Stack Opening (inches, dia.): 48  
Exhaust Flow Rate (scfm): 350  
Exhaust Temperature (°F): 1,830  
Discharge Style: Vertical, unobstructed  
Authority for Requirement: DNR Construction Permit 03-A-1319-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Compliance Demonstration(s)**

**Compliance Demonstration Table**

<b>Pollutant</b>	<b>Compliance Methodology</b>	<b>Frequency</b>	<b>Test Run Time</b>	<b>Test Method</b>
VOC	Material Tracking	Rolling 12-Month <sup>(1)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

<sup>(1)</sup> See Operating Requirements with Associated Monitoring and Recordkeeping for the required recordkeeping.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at*

*least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP SEP22B**

Associated Equipment

Associated Emission Unit ID Number: EU SEP22B

Emissions Control Description: Rail Loadout Flare (CE C22B; 12.42 MMBtu/hr)

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Emission Unit vented through this Emission Point: EU SEP22B

Emission Unit Description: Rail Product Loadout

Raw Material/Fuel: Flare Gas

Rated Capacity: 1200 Gallons per Minute

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: See Footnote <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 05-A-243-S6  
567 IAC 23.3(2)"d"

<sup>(1)</sup> The Rail Loadout Flare (CE C22B) shall operate with no visible emissions, except for periods not exceeding a total of five (5) minutes during any two (2) consecutive hours.

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 05-A-243-S6  
567 IAC 23.3(2)"a"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit: 1.88 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-243-S6

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 8.30 tons/yr <sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 05-A-243-S6

<sup>(2)</sup> This limit is a combined limit for the Truck Product Loadout (EP SEP22) and Rail Product Loadout (EP SEP22B). It is based on the sum of: (1) worst-case rail and truck emissions, (2) truck product loading losses, and (3) rail product loading losses. See Operational Limits & Requirements for material loadout tracking requirements.

Pollutant: Carbon Monoxide (CO)

Emission Limit: 2.50 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-243-S6

## **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The facility-wide total amount of product (denatured and undenatured ethanol) loaded into trucks and railcars shall not exceed 125 million gallons per rolling 12-month period. On a monthly basis, the owner or operator shall:
  - a. Record the total amount of product (denatured and undenatured ethanol) loaded, in gallons, into trucks and railcars during the previous month; and
  - b. Calculate and record the rolling 12-month total amount of product (denatured and undenatured ethanol) loaded, in gallons, into trucks and railcars.
- B. The Rail Loadout Flare (CE C22B) shall be used any time product is loaded into railcars. The Rail Loadout Flare (CE C22B) shall:
  - a. Be designed for and operated with no visible emissions, except for periods not exceeding a total of five (5) minutes during any two (2) consecutive hours;
  - b. Be operated with a flame present at all times product is being loaded; and
  - c. Be designed to ensure smokeless operation.

The owner or operator shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame.
- C. The owner or operation shall inspect and maintain the Rail Loadout Flare (CE C22B) according to the facility's operation and maintenance plan. The owner or operator shall keep a log of all maintenance and inspection activities performed on the Rail Loadout Flare (CE C22B). This log shall include, but is not limited to:
  - a. The date and time any inspection and/or maintenance was performed on the control equipment;
  - b. Any issues identified during the inspection;
  - c. Any issues addressed during the maintenance activities; and
  - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 05-A-243-S6

## **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 30

Stack Opening (inches, dia.): 60

Exhaust Flow Rate (scfm): 11,543

Exhaust Temperature (°F): 975

Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permit 05-A-243-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Compliance Demonstration(s)**

**Compliance Demonstration Table**

<b>Pollutant</b>	<b>Compliance Methodology</b>	<b>Frequency</b>	<b>Test Run Time</b>	<b>Test Method</b>
VOC	Material Tracking	Rolling 12-Month <sup>(1)</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

<sup>(1)</sup> See Operating Requirements with Associated Monitoring and Recordkeeping for the required recordkeeping.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S100**

Associated Equipment

Associated Emission Unit ID Numbers: EU P100

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Emission Unit vented through this Emission Point: EU P100

Emission Unit Description: Emergency Fire Pump

Raw Material/Fuel: Diesel

Rated Capacity: 200 BHP

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 05-A-244-S3  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.44 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-244-S3

Pollutant: Particulate Matter (PM)

Emission Limit: 0.44 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-244-S3

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit: 0.44 lb/hr, 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 05-A-244-S3  
567 IAC 23.3(3)"b"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit: 6.20 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-244-S3

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 0.44 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-244-S3

Pollutant: Carbon Monoxide (CO)

Emission Limit: 1.32 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-244-S3

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Limits**

Operating limits for this emission unit shall be:

- A. This emission unit shall operate on diesel fuel only.
- B. The sulfur content of the fuel used shall not exceed 0.5% (by wt).
- C. This emission unit shall not operate more than 200 hours per rolling twelve (12) month period.
- D. The owner/operator shall change oil and filter on this unit every 500 hours of operation or annually, whichever comes first.
- E. The owner/operator shall inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
- F. The owner/operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- G. The owner/operator shall install a non-resettable hour meter.
- H. The owner/operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
- I.
  - i. This engine is limited to operate as an emergency stationary internal combustion engine as defined in §63.6675 and in accordance with §63.6640(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition C. (above) is not exceeded. In accordance with §60.4211, the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing.
  - ii. The engine is also allowed to operate up to 50 hours per year in non-emergency situations, but the 50 hours are counted toward the 100 hours provided for maintenance and testing. The 50 hours per year for non-emergency operation cannot be used to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. This engine is not allowed to operate as a peak shaving unit.

## **Operating Condition Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The fuel used and its sulfur content.
- B. The owner or operator shall maintain the following monthly records:
  - i. the number of hours that the engine operated for maintenance checks and readiness testing;
  - ii. the number of hours that the engine operated for allowed non-emergency operations;
  - iii. the total number of hours that the engine operated; and
  - iv. the rolling 12-month total amount of the number of hours that the engine operated.
- C. The owner or operator shall maintain the following annual records:
  - i. the number of hours that the engine operated for maintenance checks and readiness testing; and
  - ii. the number of hours that the engine operated for allowed non-emergency operations.

Authority for Requirement: DNR Construction Permit 05-A-244-S3

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 11

Stack Opening (inches, dia.): 5

Exhaust Flow Rate (scfm): 750

Exhaust Temperature (°F): 800

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 05-A-244-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S110**

Associated Equipment

Associated Emission Unit ID Number: EU 110, EU 111

Emissions Control Equipment ID Number: CE C110

Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: EU 110, EU 111

Emission Unit Description: Grind System #5 and Grind System #6

Raw Material/Fuel: Corn

Rated Capacity: 822 Bushels/hr each

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 16-A-135  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" (No VE) will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>2.5</sub>)

Emission Limit: 0.77 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-135

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.77 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-135

Pollutant: Particulate Matter (PM)

Emission Limit: 0.77 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-135  
567 IAC 23.4(7)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements and Associated Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner.

- A. The control equipment, CE C110, shall be operated and maintained according to the facility's operation and maintenance plan with inspections occurring at a minimum of once per calendar year.
- B. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE C110. This log shall include, but is not limited to:
  - i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
  - ii. Any issue(s) identified during the inspection and the date each issue(s) was resolved;
  - iii. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
  - iv. Identification of the staff member performing the inspection or maintenance activity.

Authority for Requirement: DNR Construction Permit 16-A-135

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 33.5

Stack Opening (inches, dia.): 10.5

Exhaust Flow Rate (scfm): 18,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 16-A-135

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S120**

Associated Equipment

Associated Emission Unit ID Number: EU 120, EU 121

Emissions Control Equipment ID Number: CE C120

Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: EU 120, EU 121

Emission Unit Description: Grain Receiving Pit #3 and Receiving Elevator #3

Raw Material/Fuel: Corn

Rated Capacity: 25,000 Bushels/hr each

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 16-A-329  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>2.5</sub>)

Emission Limit: 3.33 Tons/yr.

Authority for Requirement: DNR Construction Permit 16-A-329

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 5.32 Tons/yr.

Authority for Requirement: DNR Construction Permit 16-A-329

Pollutant: Particulate Matter (PM)

Emission Limit: 0.67 lb/hr, 13.66 Tons/yr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-329  
567 IAC 23.4(7)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Requirements and Associated Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The facility shall not receive more than 481,800,000 bushels of grain in any rolling 12-month period. The owner or operator shall:
  - a. On a monthly basis, record the total amount grain received at the facility, in bushels; and
  - b. On a monthly basis, calculate and record the rolling 12-month total, in bushels.
- B. The owner or operator shall maintain the Baghouse (CE C120) according to the facility's operations and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE C120). This log shall include, but is not necessarily limited to:
  - a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE C120);
  - b. Any issues identified during the inspection and the date each issue was resolved;
  - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
  - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 16-A-329

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 50

Stack Opening (inches, dia.): 36

Exhaust Flow Rate (scfm): 19,400

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 16-A-329

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP S130 and EP S140**

Associated Equipment

Associated Emission Unit ID Numbers: EU 130, EU 140  
 Emissions Control Equipment Description: Cartridge Filters  
 Emissions Control Equipment ID Number: CE C130, CE C140

Emission Unit vented through this Emission Point: EU 130, EU 140  
 Emission Unit Description: Grain Bin #3 and Grain Bin #4  
 Raw Material/Fuel: Grain  
 Rated Capacity: 680,000 Bushels (each)

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

<b>EPs</b>	<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
S130 S140	Particulate Matter (PM) – State	1.88	NA	NA	16-A-330, 16-A-331
	PM <sub>10</sub>	1.05	NA	NA	
	PM <sub>2.5</sub>	0.89	NA	NA	

<b>EPs</b>	<b>Pollutant</b>	<b>lb/hr</b>	<b>tons/yr</b>	<b>Other Limits</b>	<b>Reference/Basis</b>
S130	Particulate Matter (PM) – State	NA	NA	0.1 gr/dscf	567 IAC 23.4(7)
	Opacity	NA	NA	40% <sup>(1)</sup>	567 IAC 23.3(2)"d"
S140	Particulate Matter (PM) – State	NA	NA	0.1 gr/dscf	567 IAC 23.4(7)
	Opacity	NA	NA	40% <sup>(1)</sup>	567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Requirements and Associated Recordkeeping**

All records as required by these permits shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping requirements for these permits shall be:

- A. The owner or operator must install Cartridge Filter (CE C130) and Cartridge Filter (CE C140) before October 15, 2016. The owner or operator shall:
  - a. Submit a notification to the Compliance Section and Field Office 2 once the changes are implemented.
- B. The owner or operator shall only fill either Grain Bin #3 (EU 130) or Grain Bin #4 (EU 140) at any time. Emissions shall be vented only to the Cartridge Filter (CE C130) or Cartridge Filter (CE C140) during any grain filling operation. The cartridge filter shall operate for at least 10 minutes after the grain loading operation to the steel grain bin has ceased.
- C. The owner or operator shall maintain Cartridge Filter (CE C130) and Cartridge Filter (CE C140) according to the facility’s operations and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on Cartridge Filter (CE C130) or Cartridge Filter (CE C140). This log shall include, but is not necessarily limited to:
  - a. The date and time any inspection and/or maintenance was performed on Cartridge Filter (CE C130) or Cartridge Filter (CE C140);
  - b. Any issues identified during the inspection and the date each issue was resolved;
  - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
  - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permits 16-A-330, 16-A-331

**Emission Point Characteristics**

These emission points shall conform to the specifications listed below:

<b>EP ID</b>	<b>Stack Height, Feet</b>	<b>Discharge Style</b>	<b>Stack Opening, inches</b>	<b>Stack Temperature, °F</b>	<b>Exhaust Flowrate, SCFM</b>
S130	147.5	Vertical, unobstructed	14	Ambient	2,400
S140	147.5	Vertical, unobstructed	14	Ambient	2,400

Authority for Requirement: DNR Construction Permits 16-A-330, 16-A-331

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP F130**

Associated Equipment

Associated Emission Unit ID Numbers: EU F130

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Emission Unit vented through this Emission Point: EU F130  
Emission Unit Description: WDGS (Wet Cake) Storage and Loadout  
Raw Material/Fuel: WDGS  
Rated Capacity: NA

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

There are no emission limits at this time.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The total wet cake (WDGS) production at this facility shall not exceed 300,000 tons per rolling 12-month period. On a monthly basis, the owner or operator shall:
  - a. Record the amount of WDGS produced, in tons, during the previous month; and
  - b. Calculate and record the rolling 12-month total amount of WDGS produced, in tons.

Authority for Requirement: DNR Construction Permit 14-A-456-S1

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP F150**

Associated Equipment

Associated Emission Unit ID Numbers: EU F150

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Emission Unit vented through this Emission Point: EU F150

Emission Unit Description: Open Transportation Devices

Raw Material/Fuel: Ethanol Loading Fugitives

Rated Capacity: NA

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity <sup>(1)</sup>

Emission Limit(s): No Visible Emissions

Authority for Requirement: DNR Construction Permit 14-A-457  
567 IAC 23.3(2)"d"

<sup>(1)</sup> The permit holder shall take all reasonable precautions to prevent visible emissions from crossing the property line of this facility.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

- A. The owner/operator shall develop and follow a best management practice to minimize emission from open transportation vessels. This best management practice shall at a minimum outline the action steps necessary to minimize the amount of time a vessel is open without being connected to a vapor collection system or a system that would draw air into the vessel.
- B. No product shall be loaded into a vessel prior to the connection of the vapor collection system to the vessel.

**Operating Condition Monitoring and Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. Maintain a copy of the best management practice available for review.

Authority for Requirement: DNR Construction Permit 14-A-457

**Emission Point Characteristics**

This emission point shall conform to the specifications listed below:

<b>Parameter</b>	<b>Value</b>
Stack Height, (ft, from the ground)	See Note
Discharge Style	See Note
Stack Opening (inches)	See Note
Exhaust Temperature (°F)	See Note
Exhaust Flowrate (scfm)	See Note

Note: Emissions from this unit are fugitive emissions from open transportation devices (IE Railcars or tanker trucks). These emissions occur when the railcar or truck tank is opened for loading or unloading of product or material to or from the tank. This permit only accounts for the time between opening the tank and connection of the vapor collection system to the tank for loading operations.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Authority for Requirement: DNR Construction Permit 14-A-457

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **IV. General Conditions**

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

### **G1. Duty to Comply**

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

### **G2. Permit Expiration**

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

### **G3. Certification Requirement for Title V Related Documents**

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

#### **G4. Annual Compliance Certification**

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

#### **G5. Semi-Annual Monitoring Report**

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

#### **G6. Annual Fee**

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

#### **G7. Inspection of Premises, Records, Equipment, Methods and Discharges**

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

#### **G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

#### **G9. General Maintenance and Repair Duties**

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

#### **G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
  - a. The date, place and time of sampling or measurements
  - b. The date the analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses; and
  - f. The operating conditions as existing at the time of sampling or measurement.
  - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

**G11. Evidence used in establishing that a violation has or is occurring.**

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

**G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

**G13. Hazardous Release**

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

**G14. Excess Emissions and Excess Emissions Reporting Requirements**

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the

incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

## 2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

#### **G15. Permit Deviation Reporting Requirements**

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

#### **G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations**

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

#### **G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification**

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
  - e. The changes comply with all applicable requirements.
  - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

**G18. Duty to Modify a Title V Permit**

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that does any of the following:
  - i. Correct typographical errors
  - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - iii. Require more frequent monitoring or reporting by the permittee; or
  - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
  - i. Do not violate any applicable requirement;
  - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
  - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
  - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
  - v. Are not modifications under any provision of Title I of the Act; and
  - vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - ii. The permittee's suggested draft permit;
  - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

### 3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

#### **G19. Duty to Obtain Construction Permits**

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or an anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

#### **G20. Asbestos**

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

#### **G21. Open Burning**

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"j"; 567 IAC 23.2(3)"j" - *State Only*

#### **G22. Acid Rain (Title IV) Emissions Allowances**

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable

emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

### **G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements**

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives

Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

#### **G24. Permit Reopenings**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
  - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
  - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
  - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
  - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

#### **G25. Permit Shield**

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- a. Such applicable requirements are included and are specifically identified in the permit; or
- b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
- d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

#### **G26. Severability**

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

#### **G27. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

#### **G28. Transferability**

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of *567 IAC 22.111(1)*. *567 IAC 22.111 (1)"d"*

#### **G29. Disclaimer**

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

#### **G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification**

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of *567 – Chapter 23* or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit

conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
Wallace State Office Building  
502 E 9<sup>th</sup> Street  
Des Moines, IA 50319-0034  
(515) 725-9526

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

*567 IAC 25.1(7)"a", 567 IAC 25.1(9)*

### **G31. Prevention of Air Pollution Emergency Episodes**

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

*567 IAC 26.1(1)*

### **G32. Contacts List**

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer  
Air Branch  
Enforcement and Compliance Assurance Division  
U.S. EPA Region 7  
11201 Renner Blvd.  
Lenexa, KS 66219  
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
Wallace State Office Building

502 E 9<sup>th</sup> Street  
Des Moines, IA 50319-0034  
(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

**Field Office 1**

909 West Main – Suite 4  
Manchester, IA 52057  
(563) 927-2640

**Field Office 2**

2300-15th St., SW  
Mason City, IA 50401  
(641) 424-4073

**Field Office 3**

1900 N. Grand Ave.  
Spencer, IA 51301  
(712) 262-4177

**Field Office 4**

1401 Sunnyside Lane  
Atlantic, IA 50022  
(712) 243-1934

**Field Office 5**

Wallace State Office Building  
502 E 9<sup>th</sup> Street  
Des Moines, IA 50319-0034  
(515) 725-0268

**Field Office 6**

1023 West Madison Street  
Washington, IA 52353-1623  
(319) 653-2135

**Polk County Public Works Dept.**

Air Quality Division  
5885 NE 14th St.  
Des Moines, IA 50313  
(515) 286-3351

**Linn County Public Health**

Air Quality Branch  
501 13th St., NW  
Cedar Rapids, IA 52405  
(319) 892-6000

## V. Appendix

- A. 40 CFR 60 Subpart A – *General Provisions*  
<http://www.tceq.texas.gov/permitting/air/rules/federal/60/a/ahp.html>
- B. Subpart Db – Standards of Performance for *Industrial Commercial Institutional Steam Generating Units*.  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=032e902341db8873af7fe153511e9f67;rgn=div6;view=text;node=40%3A70.1.1.1.11;idno=40;cc=ecfr>
- C. 40 CFR 60 Subpart Kb – Standards of Performance for *Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.  
<http://www.tceq.texas.gov/permitting/air/rules/federal/60/kb/kbhp.html>
- D. 40 CFR 60 Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006.  
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=bc4c913cc779deb441f61b794bf739ec&r=SUBPART&n=40y7.0.1.1.1.63>
- E. 40 CFR 63 Subpart FFFF – National Emission Standard for Hazardous Air Pollutants for *Miscellaneous Organic Chemical Manufacturing*.  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div6&view=text&node=40:13.0.1.1.1.13>
- F. 40 CFR 63 Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines*.  
<http://www.gpo.gov/fdsys/pkg/FR-2013-01-30/pdf/2013-01288.pdf>
- I. 40 CFR 63 Subpart DDDDD - National Emission Standards For Hazardous Air Pollutants For *Industrial, Commercial, And Institutional Boilers And Process Heaters*  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div6&view=text&node=40:14.0.1.1.1.5#40:14.0.1.1.1.5.137.2>